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Annual Report of the
**FEDERAL
SECURITY
AGENCY**

1951

Office
of Education

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SOCIAL SECURITY ADMINISTRATION
PUBLIC HEALTH SERVICE
OFFICE OF EDUCATION
FOOD AND DRUG ADMINISTRATION
OFFICE OF VOCATIONAL REHABILITATION
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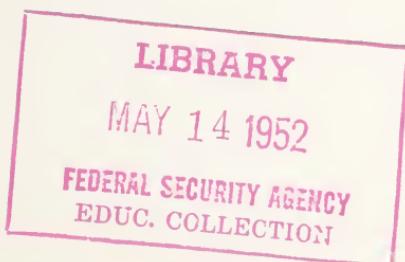
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Annual Report of the
**FEDERAL
SECURITY
AGENCY**

1951

U.S. Office of Education



FEDERAL SECURITY AGENCY

OSCAR R. EWING, *Administrator*

OFFICE OF EDUCATION

EARL JAMES McGRATH, *Commissioner*

Deputy Commissioner of Education, RALL I. GRIGSBY.

Assistant Commissioner for Program Development and Coordination,
BUELL G. GALLAGHER.

Assistant Commissioner for Vocational Education, RAYMOND W.
GREGORY.

Assistant Commissioner for Defense Activities and Director of the
Scientific Register, JAMES C. O'BRIEN.

Assistant Commissioner for State and Local School Systems, WAYNE
O. REED.

Assistant Commissioner for Higher Education, JOHN DALE RUSSELL.

Letter of Transmittal

FEDERAL SECURITY AGENCY,
OFFICE OF EDUCATION,
Washington, D. C., October 30, 1951

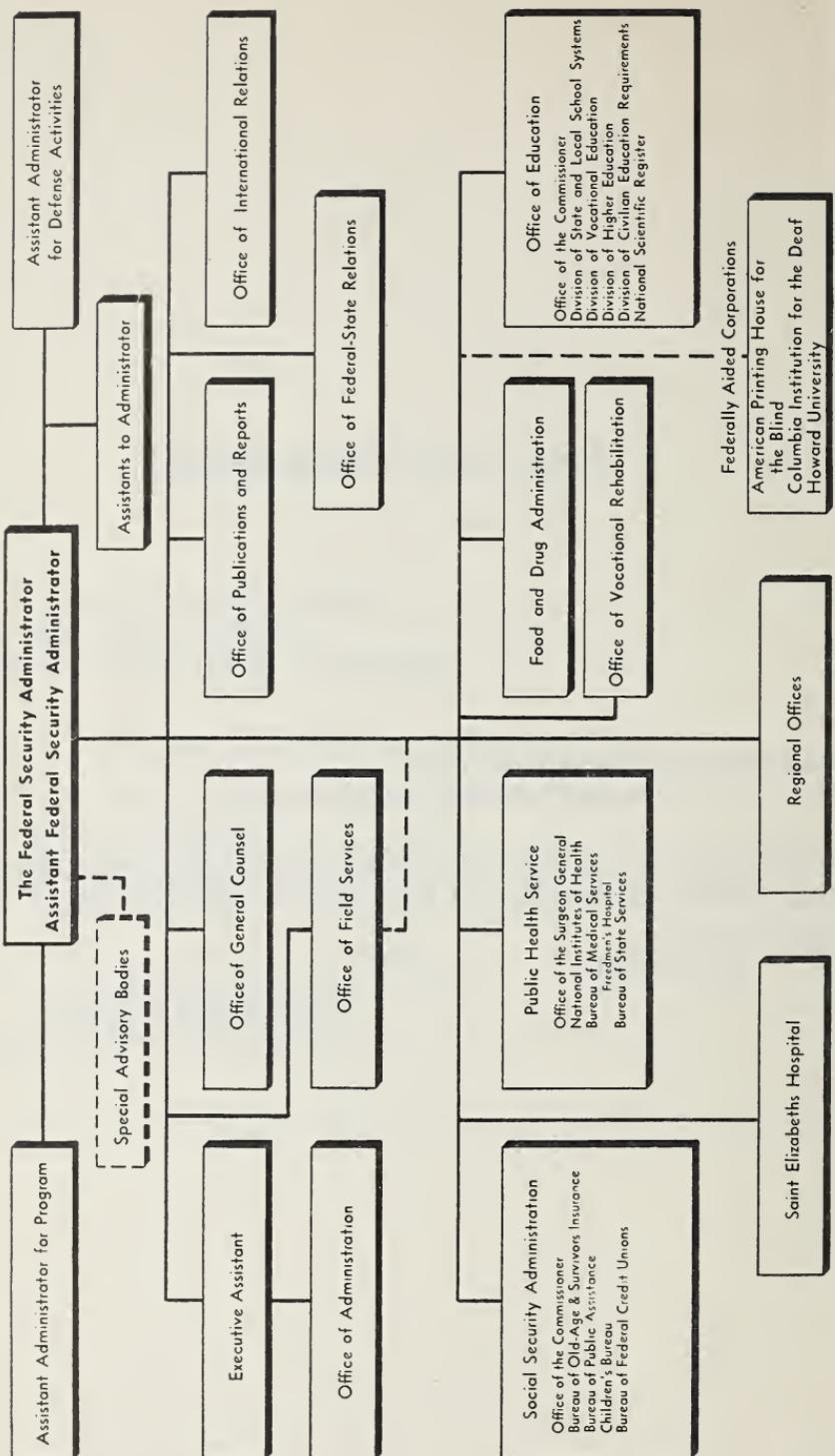
The Honorable OSCAR R. EWING,
Federal Security Administrator.

DEAR MR. EWING: I herewith submit the annual report embracing the activities of the Office of Education for the fiscal year ending June 30, 1951.

Respectfully,

EARL JAMES MCGRATH,
Commissioner of Education.

FEDERAL SECURITY AGENCY



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Office of Education

Introduction

FISCAL 1951 was a year of armed conflict in Korea. It began a week or so after the invasion of South Korea; it ended a week or so after the United Nations broadcast by the Soviet delegate, Jacob Malik, which set in motion the truce negotiations between the United Nations command and that of Communist China and North Korea.

The impact of the Korean conflict on the American people was far-reaching, as the Nation moved to mobilize its resources for defense. Selective Service was reorganized to provide for an army, navy, and air force of 3.5 million, $2\frac{1}{3}$ times the previous strength of our regular armed forces. The wheels of industry started turning for the production of vast quantities of planes, guns, tanks, and other war matériel. Shortages of raw materials—especially steel, copper, and aluminum—imposed sharp limitations on nondefense construction and industrial activity, and the sudden shift to a defense economy set off a spiral of inflation. Prices of consumer goods rose rapidly, and before any form of controls could be made effective the cost of living had increased by 9 percent.

Education quickly felt the effect of the accelerating program for defense mobilization. The diversion to defense industries of large quantities of basic materials in short supply posed a major threat to the vitally important school-building construction program which had been gathering momentum since the end of World War II. With classroom facilities still wholly inadequate to take care of the rapidly increasing school population, this was, in most communities, a matter of grave concern. The program was further threatened during the year by the inflationary rise in construction costs.

The influx of workers and their families into areas where defense production activities were to a large extent concentrated created another and exceedingly trying problem. In nearly 1,000 communities local school authorities were faced with the task of providing adequate classroom facilities for a suddenly expanded school population.

Rising prices also brought to the fore again, in sharp focus, the whole problem of teachers' salaries. New cost-of-living adjustments came up for discussion before hundreds of school boards. Again, as in World War II, teachers began to leave the profession in increasing numbers to take better paid jobs elsewhere.

Among colleges and universities, the anticipation of a sharp drop in enrollments for the succeeding academic year presented equally grave problems. With tens of thousands of young men of college age going into uniform, fears arose that it would be necessary, in many cases, to make deep slashes in the teaching staffs. Colleges were concerned with the extent to which specially qualified students would be permitted to postpone their military service until they had completed their college education.

Beyond all this, the tensions engendered by the international crisis were reflected in many ways in the classroom. And the sense that the crisis might last for an indeterminate number of years hung heavy over the entire educational world.

In the meantime, the main business of education went forward. Elementary and secondary school enrollments, public and private, set a new record of 29,828,000. College and university enrollments, however, declined slightly from the previous year to a level of about 2,500,000, chiefly because of the smaller number of students entering colleges under the GI scholarships.

The acute shortage of teachers, particularly in the elementary schools, continued to threaten the proper functioning of our public school system. And the schoolhouse shortage became increasingly critical as the rate of new schoolhouse construction failed to provide adequately for the tidal-wave of children bearing down on our schools.

Education and Mobilization for Defense

In meeting the impact of the problems, created by the international emergency throughout the fiscal year 1951, the Office of Education played an important part. The responsibility resting on the Office's leadership in the field of education was clearly recognized by the National Security Resources Board in a statement designating it as the agency for all educational planning related to the defense effort.

"In the field of education," the statement read, "the National Security Resources Board and the President are looking to the Federal

Security Agency and its Office of Education as the focal point within the Federal Government where information regarding the educational and training needs will be gathered and distributed to the schools and institutions of higher education so that they may make their maximum contribution to the defense effort."

This was interpreted by the Office as involving two levels of related activity: the responsibility (*a*) to explore the total educational resources of the Nation and to help channel them, wherever possible, into the immediate defense effort; and (*b*) to work toward safeguarding and improving present educational standards to the end that education may continue to make its basic contribution to the strength and well-being of the Nation during the critical years which lie ahead.

In following through on these responsibilities the Office laid down 4 broad programs with some 27 separate staff assignments for exploratory study and recommendation. The general headings under which these programs were set in motion were: (1) Manpower, with special reference to Selective Service policies and the training of defense workers; (2) School construction and the allocation of materials in short supply; (3) Educational facilities in federally affected areas and the administering of Federal aid; and (4) a Defense Information Service to school authorities and educational institutions.

DEFENSE INFORMATION BULLETINS

In December 1950 the Office began a series of bulletins designed to provide information and interpret developments in the over-all defense mobilization programs as they related to education. By June 30 these bulletins, published as need arose, had reached a total of 47. The majority were concerned with the regulations issued by the Office of Defense Mobilization concerning the allocations of materials in short supply and those issued by Selective Service on the drafting of college students. These bulletins were mailed to more than 2,600 school and college officials throughout the country. The response was uniformly good, and the Office received wide commendation for the performance of an essential service to education in a time of national crisis. In addition, the regular publications of the Office, **SCHOOL LIFE** and **HIGHER EDUCATION**, carried definitive articles on these matters.

CLAIMANT AGENCY FUNCTION UNDER THE NATIONAL PRODUCTION AUTHORITY

Early in the fiscal year it was apparent that, under the pressures of the defense production program, a tightening market would develop in basic materials. There were widespread fears among educators that the requirements of the defense industries would be so over-riding

that those of new schoolhouse construction and maintenance would be virtually disregarded.

These fears were based on the Nation's experience in World War II. During that period all priorities and allocations of basic materials had been handled by the War Production Board. As defense production rose to higher and higher levels, civilian operations not directly related to the war effort found themselves reduced to a fraction of what they required. This was particularly true in the field of education. As a result, there was an almost complete cessation during the war years of new school construction and a sharp drop in ordinary school maintenance and repair.

In justification it may be said that a nation engaged in all-out war—where victory is conceived of as possible within a limited time—can perhaps afford to make sacrifices of this nature. The situation in 1950, however, was vastly different. Here we were concerned not merely with resisting aggression in Korea, but with mobilizing our defense resources for a crisis that might easily last for 10, 15, or even 25 years. Under the circumstances, it was of vital importance not only to plan for the amount of defense production necessary to build our armed forces to the necessary levels, but it was also important to maintain our civilian economy at the highest level possible and to make no needless sacrifices that would weaken the Nation's essential strength.

This thinking was given official sanction as the defense program swung into action. Under the Defense Production Act of 1950, the President was authorized "to allocate material and facilities in such manner, upon such conditions, and to such extent as he shall deem necessary and appropriate to promote the national defense." A substantial part of this authority was delegated to the Secretary of Commerce, who in turn established a National Production Authority within his department.

To carry on its functions, the NPA designated certain departments, commissions, and agencies of the Government as claimant agencies. The primary task of these agencies was to represent the public interest in matters which came under their special jurisdiction. It was their responsibility to provide information on the civilian needs of the country which would be submitted to the Defense Production Administration, the planning agency of the Office of Defense Mobilization. On the basis of this information the DPA would make broad allocations of scarce materials as between the military and civilian parts of the economy and as between major segments of the civilian economy. (Later the NPA was made the operating arm of the DPA and the two authorities came under a single executive head.)

As part of this arrangement, the Federal Security Administrator was designated (Department Order 127, Department of Commerce)

as the official claimant before the NPA in respect to "school and hospital construction other than veterans' hospitals; and the domestic distribution of supplies and equipment needed in the fields of health, education, welfare, recreation, and related activities." Those functions relating to the field of education were, in turn, delegated by the Administrator to the Commissioner of Education.

A working staff was immediately organized by the Commissioner to carry out this assignment. This staff was drawn chiefly from personnel already employed within the Office since only limited funds were available for the operation.

Under Regulation 1, dated September 18, 1950, the National Production Authority established controls over some 100 materials in short supply to prevent the excessive accumulation of inventories. The immediate focus, however, was on the shortages in copper, steel, and aluminum. At the request of the NPA, the Office prepared a full-scale survey of all educational needs of the country—elementary and high schools, colleges, and libraries—in respect to these basic materials over the 1951 and 1952 calendar years. The survey, submitted March 1, covered 278 items of supplies and equipment in the field of new school construction and maintenance, and constituted the basis on which the DPA made its later determinations of the amount of materials in short supply to be set aside for education.

In the meantime, a great number of school authorities were having difficulty in procuring materials and equipment needed for the construction projects already begun. Many of them turned to the Office of Education for help, and in consequence a program of emergency assistance for hardship cases was inaugurated. From February through June some 8,500 requests for assistance were received, and in the great majority of instances the Office, working with the NPA, was able to secure the needed materials. At the suggestion of the Office, a special "set aside" in steel, for the month of June, was made by the NPA to meet hardship cases in the field of education.

The principal beneficiaries under this program were school authorities in small towns and the smaller colleges. The Office did, however, aid many of the larger colleges and universities in securing hard-to-get items of equipment, such as scientific and technical instruments and multiple switch gears. In much of this activity the Office was able to utilize to advantage the services of the field organization of the Federal Security Agency.

So far, the Federal Security Agency and the Office of Education were acting primarily in an advisory capacity to the Defense Production Administration and the NPA. But with the announcement by the DPA of a Controlled Materials Plan to go into effect July 1, 1951, this relationship was substantially altered. Under NPA Delegation 14, the FSA was given definite authority: (1) to issue permits authorizing

the commencement of all construction in the field of its jurisdiction; and (2) to establish construction schedules and allot critical material. In the field of education this authority was exercised by the Office of Education.

During the period when the CMP was in the process of being drawn up, members of the staff of the Federal Security Administration and of the Office of Education, together with representatives of nongovernmental education associations, maintained a close contact with the Defense Production Administration executives. The importance of continuing schoolhouse construction, at least at its current rate, was forcefully argued. Full data were presented covering the tremendous increase in school population expected over the next 10 years and the critical shortage in classrooms following the failure to maintain adequate construction schedules during the depression and war years.

Largely as a result of these efforts, there was reason to believe that education would be given a top priority in the allocation of basic materials with a rating equal to that of the various defense establishments, the Atomic Energy Commission, and certain other important fields of defense operation. Amounts approved for delivery, during the quarter beginning July 1, included 100,000 tons of carbon steel and substantial amounts of brass mill products and aluminum. Compared with education's position in World War II this was a distinct improvement. With a certain amount of steel still available in the free market, these allotments were sufficient to take care of most of the immediate needs of school construction already under way, but they made little provision for projects scheduled to begin construction during the quarter. It was evident that allotments for succeeding quarters would have to be greatly increased if the full requirements of education were to be met.

COLLEGE STUDENTS UNDER SELECTIVE SERVICE

Under the Selective Service Act of 1948, college and university students ordered to report for induction, were permitted to finish their academic year if their work continued to be satisfactory. With a high level of voluntary enlistment for the comparatively small pre-Korean armed forces, relatively few were affected by the draft.

The Korean crisis, however, opened up the whole question of deferment, or postponement of service, for college students under the act. The nub of the question was the extent to which specially qualified students were to be permitted to finish their full college courses before going into the armed services, and on what basis the selection was to be made.

In educational circles there were profound differences of opinion on the matter. Some felt that in a democracy no preference of any sort should be accorded college students; that all young men reach-

ing draft age should be dealt with on the same basis. These views did not coincide with those held by the majority of educators, as evidenced by a poll conducted by the National Education Association of a cross section of college presidents throughout the country. Nor did they coincide with those of Administration officials. Charles E. Wilson, head of the Office of Defense Mobilization, put the matter clearly when he stated that it was important for the armed services to "have the benefit of men trained to serve more effectively than they otherwise would."

"Our potential enemies," Mr. Wilson went on to say, "can marshal enormous manpower resources against us. There is no foreseeable chance that we can match their manpower in terms of sheer numbers. The factors potentially in our favor are our military competence, our technological advantage, and our vast industrial capacity.

"The effectiveness of these three factors depends almost entirely upon the technical, scientific, managerial, and industrial skills of our population which are already in short supply. Success or failure in meeting the forces arrayed against us will depend in large measure upon the intelligence with which we husband these skills and use them to their fullest advantage."

Several proposals, widely differing in content, were set forth by various individuals and educational institutions, and the matter was thoroughly explored at committee hearings of the House and Senate. The law enacted retained the presidential authority to defer college students. Under this authority the new Selective Service regulations permit the postponement of induction into the armed services, over the succeeding school year (1951-52) for students in the following categories:

(a) students or those accepted for admission in certain professional schools (medicine, dentistry, veterinary medicine, osteopathy, and optometry) who are certified by their schools as doing satisfactory work;

(b) full-time graduate students seeking a graduate degree and similarly certified;

(c) students accepted for admission to graduate schools who have satisfactory scholastic standing or can meet certain prescribed tests;

(d) undergraduates accepted for admission to their next year of study who have a comparatively high scholastic standing or who can meet certain qualification tests.

The bill also incorporated the principle of Universal Military Training, with a commission to be appointed to draw up a specific program.

College authorities, of course, were concerned with the determination of the draft age—whether it should be placed at 18 or 19—since this would affect the number of students eligible for induction. On the compromise finally agreed upon, age 18½, studies made by the

Office of Education showed that approximately one-third of all currently enrolled college undergraduates would thus be affected—some 370,000 out of a total male enrollment of 1,059,000. This relatively low proportion was caused by the fact that about 423,000 students were World War II veterans and therefore not subject to the draft and 201,000 were ROTC students. The remainder of the male students were for the most part, 4F's or under draft age.

During May and June, Selective Service tests, administered by the Educational Testing Service of Princeton, N. J., were given at approximately 1,000 examination centers throughout the United States and its Territories. As of June 30, the results of these tests had not been made known.

DEFENSE TRAINING PROGRAMS

During World War II, the schools and colleges of the Nation played a vital role in the training of workers for jobs in defense industry. Under various national defense programs, administered by the Office of Education, more than 13 million persons were given such training. This tremendous effort was credited, in no small way, with breaking the bottle-neck in production of war materials and gave industry the skilled workers it required to build the necessary ships, planes, tanks, and guns. It was carried under three general headings:

1. *The Vocational Training Program for War Production Workers* was operated mainly in the public secondary schools under the State Boards for Vocational Education. During the 5 years from 1940 to 1945, this program enrolled nearly 7½ million persons. Nearly 5 million were workers employed by war industries who received training supplemental to their war employment. The other 2½ million received specialized training prior to their employment in war industries. Of these 7½ million, about 1½ million were women with no previous industrial experience.

2. *The Rural War Production Training Program* was also operated in the secondary schools under the State Boards for Vocational Education. This program had a total enrollment of more than 4 million. About 1½ million of these received training in the operation and maintenance of farm machinery and another 1½ million in food processing and conservation. Something like three-fourths of a million were trained for employment in war industries.

3. *The Engineering Science and Management War Training Program* was operated in some 240 colleges, universities, and technical schools under plans approved by the Office of Education. The job here was to assist in meeting the shortage of engineers, chemists, physicists, and production supervisors in fields essential to national defense. Total enrollments were nearly 1,800,000, and 10 types of

courses were offered, with chief emphasis on electrical engineering, engineering drawing, and industrial engineering.

On September 9, 1950, following the outbreak of the Korean conflict, the President approved a memorandum of the Director of the Bureau of the Budget bearing on the training of defense workers under the general defense mobilization program. This memorandum laid down the principle that the Department of Labor would identify all training needs for defense activities and that the Federal Security Agency, through the Office of Education, would "develop plans and programs for the education and training, in groups or classes under organized auspices, of personnel needed for work in occupations essential to the national defense."

In December 1950, at the request of the National Security Resources Board, the Office undertook a survey of the plant research and instructional facilities of some 1,900 colleges and universities. The task was to assemble, analyze, and classify all pertinent information, and make it available to the Department of Defense and other Federal agencies requesting it. By June 30, 1951, more than 1,100 completed reports had been received. This was the first time that such comprehensive information had been assembled covering college and university facilities. The program was designed to operate on a current basis and, by the end of the year, was already proving useful to the defense efforts of 21 different units of the Federal Government.

Along with these activities, a Nation-wide program for the training of defense workers was drawn up covering two types of training to meet defense production requirements:

1. *Training for immediate production needs*—Introductory training on the job for new workers, refresher training for those returning to the labor market, and instruction required as the result of shifts from nondefense industries or upgrading of workers in the plant.

2. *Training for longer range needs*—For the skilled trades and for scientific, technical, and defense pursuits.

Defense training of less-than-college grade was to be carried on, under the direction of the Office of Education, by State Boards for Vocational Education and State and local vocational schools. Defense training of college grade was to be carried on, under the direction of the Office, by institutions of higher education.

As of June 30, no specific funds were available for these programs. Many high schools undertook as much defense training of workers as they could with the money at their command, but the effort touched only the edges of the problem.

Without question the need for training is imperative. Defense Mobilizer Charles E. Wilson has said that in order to meet our defense production goals the part of the labor force engaged directly or in-

directly in defense production will have to be increased in 1951 by 3 to 4 million workers. In this connection, it should be pointed out that the employment situation is radically different from what it was in 1940. At that time there was a large mass of unemployed workers eager to undergo specific training that would enable them to get defense jobs. Today, we have nearly full employment. Most of our workers are earning comparatively good wages in comparatively stable jobs. There is practically no surplus of young people on our farms. Any sharp increase in the labor force to meet our defense needs will probably require the training of a larger number of women than in World War II. It will be necessary to put greater emphasis on the training of the physically handicapped and the 4F's. And we shall have to draw heavily on the services of the older and retired workers.

Over the next several years, at least, our schools and colleges can look forward to shouldering a heavy load in this important area of the Nation's defense program.

ASSISTANCE IN FEDERALLY AFFECTED AREAS

The rapid stepping-up of defense activities brought heavy pressure on the educational facilities in communities located near military installations and defense production projects. Military camps and bases were being reactivated or expanded to train an increasingly large number of men inducted into the Armed Forces. Shipyards were reopening in a number of areas and expanding production in others. Airplane production went into high gear, and factories producing all manner of war matériel were also expanding their rate of production. These pressures were felt even more heavily in connection with the Paducah (Ky.), and Savannah River (Ga.) projects established by the Atomic Energy Commission.

As a result of all this, workers by the tens of thousands with their families had moved into these communities to take defense jobs, and it was evident that the pattern of congested areas, so familiar during World War II, was being repeated. This was especially true of school facilities for workers' children. All the worst aspects of the Nation-wide schoolhouse shortage were intensified—overcrowded classrooms; use of fire-hazardous buildings, basements, and empty stores, together with recourse to half-day sessions.

Beyond that, the heavy influx of military personnel into military installations and bases—civilian workers as well as men in uniform—created even more imperative problems, since in most instances there were few school facilities for the children of families moving into these areas. Many of these children were sent to schools in the surrounding communities, thus swamping their already overcrowded classrooms.

In September 1950, legislation was enacted by the Congress (title II of Public Law 815) providing for various forms of Federal aid for new schoolhouse construction in communities struggling with these problems. About the same time, additional legislation was enacted (Public Law 874) to provide Federal assistance to these communities for current operating expense. In the fiscal year 1951, the sum of \$96.5 million was appropriated or authorized for Public Law 815 and \$23 million was appropriated for Public Law 874.¹ In both instances, the amount of Federal payments was determined primarily on the basis of the Federal impact in terms of federally affected children involved and property exempt from taxation.

By the end of the fiscal year, 865 applications for new school construction under Public Law 815 had been received, involving an estimated 540,000 children. The full amount to which the communities were entitled came to some \$340 million. Since this was far in excess of the amount appropriated by the Congress, the Commissioner of Education was forced to determine the relative urgency of need for school facilities. The \$96.5 million available was apportioned among those applicants whose claims were adjudged to be the most pressing. Preliminary allocations, as of June 30, showed that \$88 million had been reserved for 290 specific projects in 241 school districts. Of these projects, 228 involving a little more than \$74,000,000 served specific defense activities; 8 requiring \$899,000 were for non-defense activities such as reclamation and flood-control activities and Indian reservations; and a little more than \$13,000,000 was reserved for 54 projects in areas still suffering from the impact caused during World War II. Many of the last group still had children living in federally owned nontaxable housing projects built in wartime.

Under Public Law 874, applications for Federal aid to meet current school expenses were received from 1,210 qualified applicants with certified entitlement totaling approximately \$29 million.

NATIONAL SCIENTIFIC REGISTER

In the summer of 1950, as part of the over-all manpower program, the National Scientific Register was established in the Office of Education as a special project of the National Security Resources Board. Its primary responsibility is to develop a selective, analytical inventory of the Nation's specially trained scientists and technologists in the physical, natural, and engineering sciences. It also develops studies relating to various phases of the Nation's scientific manpower

¹ A supplemental appropriation in the amount of \$5.7 million was made available after the close of Fiscal '51 to cover requirements of Public Law 874 during the fiscal year 1951.

resources and provides the machinery necessary for the full utilization of scientific skills in the event of total mobilization. These data, along with the studies and reports based on them, will be used by Government agencies and other institutions concerned with mobilization planning, training, military deferment, scholarship, and research programs.

CIVIL DEFENSE

During the year, through its Division of Vocational Education, the Office worked with the Civil Defense Administration in developing training plans needed to prepare people for duty in various aspects of civil defense. It also maintained continuing liaison with the CDA in its general educational work. In addition, the Office cooperated with the Red Cross in preparing suggestions for the establishment of courses for the training of teachers in home nursing.

The foregoing are the chief activities of the Office of Education growing out of the international emergency. But in a variety of other ways the day-by-day work of the Office felt the impact of the crisis as the Nation mobilized for defense.

Reorganization of the Office of Education

In February, the administrative structure of the Office of Education was reorganized. Among other measures taken, the number of operating divisions was reduced from eight to three, and certain specific responsibilities, previously more-or-less scattered throughout the various divisions, were brought together at the staff level to permit more effective coordination.

This "streamlining" process had as its objective more than just an increased efficiency of operation as such. Its chief purpose was to enable the Office to move more directly and more boldly toward carrying out its primary responsibilities in the field of American education.

At the time it was first established in 1867, the functions of the Office had been broadly laid down as involving "research into educational matters, the dissemination of information, and the promotion of education." From time to time, however, various administrative functions had been delegated to it. The Office, for instance, was given charge of the allotment of Federal funds to the States for the land-grant colleges. It organized and administered for more than 40 years, the famous "Reindeer Service" to provide education for the native population of Alaska. From 1932 to 1943 it administered the Federal-State program of vocational rehabilitation. In 1933, it was given responsibility for administering the Nation-wide system of vocational training in the public schools. And during World War II, as

previously stated, it directed a vitally important program for the training of war workers and also of engineers and scientists needed for the war effort.

As an arm of the Government, administering the Federal interest in various aspects of education, it was acknowledged that the Office had been highly successful and had served an exceedingly useful purpose. But in terms of its fundamental purposes as originally outlined, its record, according to many of its critics, had been less impressive. Basic research in education had not been actively advanced; it had tended to be limited to the compilation of statistical data. The dissemination of information, for this reason, had also tended to be limited in scope. And promotion of education—in other words, the function of leadership in the field—had been caught in the shallows of advisory and consultative services.

With these ideas in mind, during April of the previous fiscal year, the Office had engaged the Public Administration Service of Chicago to make a thorough-going survey of its administrative functions and activities. The intent was to secure an objective study of the degree to which the Office was meeting its primary responsibilities and of measures that could be taken to strengthen its operation.

The survey was financed through money obtained from the President's fund on management improvement. The survey itself was directed by Francis S. Chase, professor of educational administration at the University of Chicago, and the report was completed in October of the year under review.

In evaluating the work of the Office, the report sharply scored its failure, over the past years, to focus attention on the most pressing educational problems. To a large extent, it found, the energies of the Office were dissipated in scatter-gun projects. There was "a prodigious amount of activity, and the production of a large number of studies of interest to segments of the educational clientele of the Office, but of limited value in terms of major problems confronting American education."

This scatter-gun approach was largely, the report stated, the result of the Office's organization and staffing pattern. The operating divisions were for the most part manned by specialists primarily concerned with their own field of interest who, for all practical purposes, made their own selection of projects to be initiated. In addition, a considerable number of more-or-less unrelated studies were undertaken at the request of educational groups outside the Office. As a result, according to the report, what was obviously a heavy year's work showed little evidence of basic planning or direction.

Furthermore, the report stated, a large part of the time and energy of staff personnel was absorbed in correspondence and in providing

consultative services to school authorities on their own specialized subjects. These functions, important as they were, tended further to fragmentize the activities of the Office. What was needed, the report insisted, was an organization through which the Office could effectively make use of its full resources to deal with the over-all problems of education and to swim vigorously in its main current. There was increasing need for high-level research—either within the Office or under its direct sponsorship—which should concentrate on matters affecting the structure and quality of American education as a whole. The chief effort of the Office should be directed toward a better anticipation and speedier identification of major educational problems and the development of means to meet and resolve these problems.

As a necessary step toward the achievement of these objectives, the report recommended that the activities of the Office should follow the natural pattern of American educational needs and be directed through three main channels: a Division of State and Local School Systems, a Division of Vocational Education, and a Division of Higher Education. These recommendations, together with other suggestions looking toward better administration, were largely incorporated in the reorganization plan which was put into effect during February.

Under the new plan each division, headed by an assistant commissioner, in close collaboration with the other divisions and with the newly established Program Development and Coordination Branch in the Commissioner's Office, undertakes all programing and operation within the area of its responsibility. It is thus able to concentrate on those matters, from the earliest possible stage of their development, which contribute most vitally to the continued progress of American education. Moreover, a tighter organization makes it easier to establish task forces on certain program assignments drawn from the staff resources of the entire Office. And top-level review in the Commissioner's Office of all divisional programing and operation serves to coordinate the efforts of the entire Office.

The Office believes that its administrative reorganization will clear the way for a closer realization of its basic objectives. What is imperative at the present time is effective leadership by the Federal Government in the general field of education. Such leadership in no sense implies Federal control or anything even remotely pointing in that direction; the operation and control of our public schools should, and must, continue to be the responsibility of State and local governments. It does, however, imply a Federal agency actively concerned with major trends in education and their relation to social and economic developments both at home and abroad. The Office should be capable of originating broad policies within the framework of the national

interest, and of interpreting these policies to the States and local communities at the operating level.

Moreover, there is every evidence that truly dynamic leadership of this nature will be welcomed by our schools and colleges. A large number of the problems which State and local authorities must cope with cut across geographical lines and must be dealt with in national terms. These authorities are looking more and more to unified leadership for help in keeping their own State and local programs in proper focus. This is especially true as the Nation enters what may prove to be the most critical period of its entire existence. Such leadership would also provide a central rallying point for the various organizations—both lay and professional—which are making many sound and substantive contributions to the advancement of education throughout the country.

Focal Points for Action

The long-run challenge to the Nation which the international crisis presents is dealt with below. The immediate crisis, however, has brought to the stage of even greater importance some of the most pressing problems which educators were grappling with before the outbreak of the Korean conflict. More than ever, if we are to come safely through the long period of stress that lies ahead, we must face squarely the need for action—and action *now*—looking toward the effective solution of these problems.

THE SCHOOLHOUSE SHORTAGE

Among the most insistent of these problems is the appalling lack of adequate classroom facilities to house our rapidly increasing school population. Public Law 815, passed by the Congress in September 1950 to provide for new schoolhouse construction in federally affected areas (see p. 11), also took cognizance of this over-all construction problem. Under title I, \$3 million was appropriated to finance a State-by-State Nation-wide survey of school facilities. This sum was allotted among the States on the basis of each State's proportionate school-age population, with a State contribution to match the Federal payment. The project will enable the States to "inventory existing facilities, to survey the need of additional facilities in relation to the distribution of school population, to develop State plans for school construction programs, and to study the adequacy of State and local resources available to meet school facilities requirements."

Under the law, the Commissioner of Education serves as coordinator of the survey with authority to approve applications from legally designated State educational agencies and to prescribe the form of the

reports. The Office also provides consultative services to these agencies.

As of June 30, 1951, surveys had been initiated in 39 of the 53 States and Territories, three of them without use of Federal funds. The inventory phase of the reports is scheduled to be completed by December 1, 1951; the target date for the development of 10-year school plant construction programs is set for June 30, 1953.

Such a definitive survey is, of course, long overdue. It should provide a working blueprint of the Nation's need and, it is to be hoped, a further spur toward meeting those needs. Studies conducted by the Office of Education and by other nongovernmental organizations have repeatedly emphasized the critical situation in which the Nation finds itself in respect to its school plant.

Over the past 20 years there has been a tremendous lag in the construction of new elementary and secondary public schools. During the depression, construction was drastically curtailed. In 1934, for instance, the average amount spent per child enrolled, per year, was only \$2.24 compared with the 1922-28 average of \$15.21; and by 1939 the average was still less than \$10. During the war years, owing to the acute shortage in building materials, the situation took an even sharper turn for the worse and all new construction came virtually to a halt. And for the immediate postwar years, the continued shortages plus inflated prices of materials and manpower greatly hindered most communities from entering upon any important school-building program. The result of all these factors is a tremendous backlog of accumulated construction needs.

Furthermore, estimates indicate that one out of five schoolhouses now in use throughout the country should be abandoned or extensively remodeled. Many are fire hazards. Others are health risks lacking normal sanitary conveniences. Thousands are essentially obsolete—unsuited to modern educational needs or demands of administrative efficiency. And the shifting of population during World War II has left many others too remote from the population centers they once served to be utilized economically.

In the meantime, the unprecedented birth rate of the war and post-war years has added enormously to the pressures. These pressures are now being felt particularly in our elementary schools as evidenced by the overcrowded classrooms and makeshift methods of housing in virtually every community. They will shortly be felt in our secondary schools. By 1957-58, it is estimated that the total enrollment, kindergarten through secondary schools, will reach more than 32 million, an increase of 6 million over the public-school enrollment of 1950-51.

Merely to take care of this increase it will be necessary to provide at least 222,000 more classrooms in the next 7 years. And to supply the

backlog of needs for replacements in plant structure and the reorganization of school districts for more effective administration something like 252,000 more will be needed. It will further require about 18,000 classrooms a year to care for normal replacements, or 126,000 rooms over 7 years. This brings the grand total up to about 600,000, which is approximately 50 percent more usable classrooms than the Nation now has.

At 1950 prices, the estimated basic cost of a classroom, including related facilities, was \$27,000. The total cost for the 600,000 classrooms needed over the next 7 years is therefore something like \$16 billion, or an annual investment of more than \$2 billion. Moreover, the general price rise following the outbreak of the Korean conflict has already added about 12 percent to the 1950 costs. Any calculation of costs over the next decade must remain highly speculative.

Before restrictions were placed on critical materials the yearly rate of new construction for public elementary and secondary schools was running to about \$1.3 billion. Even if it were possible to continue at this rate—which the developing shortages in steel and other critical materials make highly unlikely—less than 60 percent of the Nation's 7-year school construction needs would be met. Moreover, the immediate needs of elementary schools are so pressing that even a 100-percent fulfillment of the annual construction schedule would fall far short of providing the number of classrooms required to take care of the children already going to school. It will be seen, therefore, that the situation is rapidly approaching a major national catastrophe.

The Office of Education is acutely aware of the difficulties faced by State and local authorities. It is increasingly evident that local communities can finance only a diminishing part of needed new schoolhouse construction from local bond issues supported by general property taxes. Throughout the country, there is a clear trend toward State aid for new school construction and, by 1950-51, 23 States had established such a policy.

Along with this policy, there is a staunch effort by some of these States to attack the problem of redistricting in order to distribute the tax burden equitably and to make the most effective use of the money spent for new school facilities. In Illinois, for instance, from 1944 to 1950, the number of school districts was reduced from 11,955 to fewer than 4,600; in Arkansas, from 2,179 to 421; and in Idaho from 1,114 to 299. At least 9 other States have made genuine progress in this direction.

Staff members from the Office are also working with State authorities to see that new school planning and construction are blueprinted to meet the changing needs of modern education and to secure the maximum degree of efficient and economical administration.

The essential detailed facts for dealing with the schoolhouse shortage, however, are still to be gathered,. The Nation-wide survey of school construction needs, now in progress, should help to pin down these facts in incontrovertible form. Among other things, it should throw a better spotlight upon the variations in the amount and quality of school facilities that exist among the individual States, and the extent to which the resources of each State can be applied to meet these needs without some measure of outside help.

The facts already known, however, urgently pose the question whether the individual States and communities can furnish a really effective solution for the problem as a whole. New York and New Jersey, for instance, according to 1949 figures can support a school budget for current expenditures which averages \$284 and \$273, respectively, per pupil per year. But Arkansas and Mississippi spend a larger proportion of their incomes to support a school budget that averages \$99 and \$77, respectively.

Our most immediate hurdle, however, is the alarming shortage in steel, copper, and aluminum that has developed under the program for defense mobilization. Officially, the needs of education are recognized as on a par with our defense needs, and the requirements for new school construction are to be given top priority. But as previously indicated, allocations for this purpose are already being limited to emergency needs, and there is every likelihood that over the next 2 years the pre-Korean rate of new construction will be sharply curtailed. This slash will only intensify the struggle to meet the crisis which 20 years of neglect have brought to a head.

The same pressures that are being felt in public schools are also being felt in our colleges and universities. In the decade that has elapsed since 1940, the last year of normal college attendance prior to World War II, college enrollment has increased nearly 80 percent, but the physical facilities for instruction and residential housing have increased slightly less than 20 percent. Moreover, the facilities available in 1940 were, in general, inadequate to accommodate the number of students then enrolled.

The greatest increase in physical facilities for colleges that have been provided during the decade came from the Federal Government through the re-use of buildings initially constructed for military purposes incident to World War II. During the war, neither construction materials nor funds were available for extensive educational or other civilian construction projects.

Since the close of the war, according to a survey made by the Division of Higher Education in March 1951, 915 of the 1,858 colleges in the United States have undertaken the construction of one or more permanent buildings. In the aggregate these buildings total 2,640,

at a cost of more than a billion dollars. As the year ends, it is evident that the shortages of critical materials will make it impractical for colleges and universities to construct all of the buildings they have on the drawing board.

THE TEACHER IN AMERICA

During the 1950-51 school year, spiraling consumer prices cut sharply into the real wages of salaried persons—and all teachers work on salary. By January 1951, when the general price and wage controls were put into effect, the cost of living had risen 9 percent over pre-Korean levels—a 9 percent salary cut for every teacher.

Under a ruling by the Wage Stabilization Board, school authorities were given the right to raise teachers' salaries at their own discretion, providing the increase did not exceed the 10 percent over January 1950 levels permitted to industrial workers and other segments of the Nation's labor force. Many communities made an earnest effort to adjust salaries, in some degree, to these rising costs. A full analysis of these increases had not been completed by the end of the fiscal year, but there was every likelihood that the buying power of the 1950-51 salary level for the entire country would show a sharp drop over that of the previous year.

Meanwhile, estimates for 1950-51 show that the average teacher's salary in the United States during that year was \$2,980—a 3.3 percent increase over the preceding 12-month period. The average high-school salary was \$3,375; the elementary school, \$2,765. Geographically, however, there was a wide variation. In the 10 States with the highest per capita income, the estimated average high-school salary was \$4,100; in the 10 with the lowest per capita income the average was \$2,460. Elementary school salaries showed the same variations.

In the elementary schools the teacher shortage continued unabated. In fact, it was further heightened, as already noted, by the tendency on the part of many teachers to abandon their profession in favor of better-paid defense jobs. The same trend was even more evident among high-school teachers, though here the result was less immediately disastrous. Over the past 5 years, a disproportionate number of young people entering the teaching profession had trained for the secondary school (and higher salaried) appointments. In consequence, there was an actual surplus of high-school teachers except in certain fields.

In many States, an attempt was made to provide re-training courses for accredited high-school teachers to enable them to take on elementary school assignments. By the end of the fiscal year, no real evaluation of this experiment had been made, though it showed distinct possibilities.

There is no doubt that the teacher shortage remains one of the most critical problems facing American education. To provide sufficient teachers to take care of the tremendously increased elementary and high-school enrollment over the next 10 years—and to cover ordinary losses through death, resignation, and retirement—it is estimated that we shall have to train annually a minimum of some 130,000 young men and women.

The current year saw a top record of 123,600 normal school or college graduates prepared for elementary or secondary school teaching, but this was still well below the number needed. Moreover, the average for the years 1946-47 to 1950-51 was only 93,380, or less than 72 percent of the minimum number needed on the 10-year schedule of requirements. For elementary schools, the situation was even worse, since the ratio here was only one to three of the number needed. There is grave danger that these ratios will be further reduced under the pressures of defense mobilization and the entry into our armed services of a large number of our potential teachers.

As matters stand now, probably one out of eight of all our elementary classrooms are in the charge of teachers holding only emergency certificates. Though this proportion has declined slightly over the past 5 years, we are still entrusting the education of too many of our children to teachers who cannot qualify for even the lowest certificates issued in our public-school system. Moreover, the preponderance of these certificates are issued to teachers in our rural schools. This represents, in a particularly objectionable form, the sort of social and economic discrimination which persists throughout the entire structure of our public-school system. Because of our failure to provide a sufficient number of qualified teachers, hundreds of thousands of our youngsters are getting markedly inferior classroom instruction, and those tend to be the children in the less-advantaged areas.

Fundamental to this whole problem of the teacher shortage, of course, is the question of salary levels. A study made within the Office, during 1950-51, shows the fluctuations of teacher salaries over the last 40 years in terms of dollars and real wages. The latter have shown an almost steady comparative decline. Compared with the increase of real wages in, say, the medical and legal professions, as well as for industrial workers, they are distinctly subnormal.

Without question, teaching, like the clergy, attracts many young people of idealistic temperament who choose the profession as a form of service. For all, however, it must offer a means of livelihood. But if the living offered is increasingly scaled downward, fewer will choose this means; and more, under economic pressures—especially young men trying to raise families—will abandon their profession in favor of something better calculated to pay grocery bills.

Probably the difficulty lies in the fact that, originally, salary levels were set at the time when, for most young women and some men of a scholastic bent, there were offered few opportunities other than teaching. Today, that is certainly not true. There are a large number of fields which young women with a college education (to concentrate on only one sex) can enter and make a genuine career. Those who enter business with an A. B. and reasonable ability can hope to climb the ladder into some of the better-paying executive or specialist jobs. Only recently, Gimbel's Department Store in New York announced its preference for Ph. D.'s as beginning copy writers in its advertising division!

Meanwhile, teachers' salaries have remained tied to their original base. Such necessary increases as from time to time were granted had, for the most part, to be painfully extracted from the local tax funds. Only rarely have the adjustments been sufficient to meet even the rise in current living costs; on a competitive basis with other opportunities offered to young people they have become notoriously inadequate.

There are other factors, of course, besides the economic. Many teachers are overworked to the point where they "can no longer take it." Others resent the limitations on their personal freedom imposed by the mores of the community. Still others find that the administrative methods of some public-school systems act to curb their natural enthusiasm and zeal for "doing a good job."

A really thoroughgoing piece of research into all phases of the teacher shortage is an imperative. Such a survey should explore all phases of the matter—economic, social, and psychological—and attempt to uncover the root causes. It should also be prepared to make concrete recommendations that would serve to break the continuing "logjam."

Among other things, the survey should inquire into the declining ratio of men teachers in elementary classrooms and the extent to which the decline is affecting the quality of our elementary education. Preliminary studies in the Office of Education show that, during and after each war, this ratio declined sharply and never regained its former level. After World War I, it dropped from the 1913-14 level of more than 17 percent to slightly less than 11 percent. From 1920 to 1940, it remained approximately at this level up to World War II when it was cut almost in half. The present level is about 7 percent. It is a distinctly unhealthy situation for American education to find itself in.

Another field of inquiry in which the Office has already made some exploratory studies is the excessive cost to the educational economy of training teacher replacements. Industry has long been acutely

aware that a high rate of turnover constitutes a heavy charge against labor costs; on any strict accounting basis the cost of "breaking in a new man" adds up to a considerable sum. Similarly, in education we have a situation where the States are spending hundreds of thousands of dollars annually to train teachers who may remain in the profession only a comparatively few years before leaving to take other jobs. Anything which can reduce this turnover would reduce the cost of training replacements. It might also release State funds to be applied to raising the general level of salaries.

As in the matter of providing proper school facilities, especially in the lower-income States, the question of Federal aid to the States is paramount. It is doubtful if anything like an adequate minimum level of teachers' salaries throughout the Nation can be established without this aid. Both the teacher shortage and the schoolhouse shortage expose the primary weakness of our public-school system—the State by State differentials in providing equal educational opportunity for all the children of the Nation. In far too many States, the lack of adequate tax resources is the root cause of the failure to build enough good schools and to pay decent salaries to teachers. As a result, there are literally millions of our young people who, judged by "normal" standards, are receiving an almost negligible amount of education.

Broadly speaking, these are youngsters who come from the lowest income families and for lack of adequate opportunity are fated to live out their lives in the same round of poorly paid jobs that is the lot of their parents. This contention is implicit in the findings of the Sub-Committee on Low-Income Families of the Joint Committee on the Economic Report under the chairmanship of Senator John J. Sparkman of Alabama. These findings show, among other things, the close relationship between low income and sickness and disease, low income and lack of educational opportunity, low income and lack of any basic sense of security. Obviously, no flat statement of cause and effect can be made. Poverty breeds ignorance and disease. But ignorance and disease also breed poverty. Essentially it is a vicious circle—one in which not only individuals and families are caught, but large and important sections of our population. Those States which have the poorest schools, the fewest hospitals, doctors, and public health services, have also the lowest per capita income.

If this circle could once be broken, these families would be released to build toward the standard of living that is enjoyed in other parts of the Nation. Certainly, education offers one of the most direct means to break this circle. And in presenting the arguments for Federal aid to education these factors should not be overlooked. For the arguments are not grounded merely on the right of every Ameri-

can child to secure as much education as he is capable of acquiring, important as these rights are, but are also based on the social and economic necessity of the Nation as a whole.

VOCATIONAL TRAINING

No segment of secondary school curriculums provides education in more "practical" terms than does our program for vocational training. In its growth and development, the Office of Education has been a highly constructive force. Since 1933, when it was first authorized to administer funds appropriated by the Congress for a Federal-State program, the Office has worked in close association with State Boards of Vocational Education throughout the country.

For tens of thousands of youngsters, these courses provide essential training that enables them to qualify for specific jobs at better wages than probably they could otherwise obtain if they were obliged to start without the benefits of any such training. For boys and girls living on farms, it provides not only a working knowledge of the various skills and abilities that are important in the operation of a modern farm and farm home, but also a grounding in modern agricultural methods, chemistry, and marketing methods that will enable them, after graduation, to deal effectively with their own individual problems. For boys entering industry, it helps develop a high degree of mechanical dexterity along with an understanding of the scientific principles of a given craft, both of which are essential to the skilled worker. And for a large number of girls it provides sound training in home economics and in practical nursing.

The tremendous contribution which our vocational training schools made to the training of war workers during World War II has been mentioned above. Without question, they will be called upon to make a further contribution as our defense production mobilization swings into higher gear. These "emergency" responsibilities emphasize the basic importance of the concept of "training for production" which underlies our whole vocational training system. America's industrial strength (which is also the basis of its military strength) rests largely on the skill of its workers and their ability to attain a high level of productive capacity. As productive capacity increases and machines become more complex, a larger and larger number of jobs must be filled with workers possessing special skills. For the most part, the technical requirements of these jobs demand men and women with at least the fundamentals of a high-school education. If, in addition, the job applicant has the specific training which enables him to bypass or shorten the apprentice stage, his value to industry is greater.

Moreover, it is the combination of sound academic and vocational education which often puts the worker most readily in line for pro-

motion within the plant. The world-famous American "know-how," in a sense, rests not merely on top-level engineering ability but on the adaptability of the average workman and his capacity to grasp quickly the essentials of an intricate technical process.

All this is education in its most practical down-to-earth aspects. Certainly, vocational training must become increasingly an area to which our best educational thinking is directed, and one which must be strengthened and developed until it is given the widest possible application.

ADULT EDUCATION

Adult education is another field to which increasing attention must be paid. Many schools provide courses for the older men and women in the community who seek to make up the deficiencies of their earlier education or to enlarge the scope of their present knowledge. Vocational training classes are open to older industrial workers who desire special training to fit them for specific jobs.

But, as yet, we have scarcely begun to explore the full potentiality of this area. Adult education should do more than provide for occupational competencies or make up for earlier deficiencies. In many communities, it has shown that it can become a genuine force in helping adults to understand, and to take an active part in the various aspects of the civic and social life of the community. Moreover, the Conference on Aging, held in August 1950 under the sponsorship of the Federal Security Agency, laid great stress on the importance of adult education. Our vocational training system, it urged, should be expanded to aid workers nearing retirement age to retrain for jobs more nearly suited to their individual physical and mental capacities. And adult education, in general, should be directed toward enabling older people to develop new interests or hobbies that will help them keep mentally alert during their declining years.

LIFE ADJUSTMENT EDUCATION

Another area where effective leadership can be, and should be, applied is in the matter of curricular reorganization in the secondary schools. Most alert school authorities are conscious that some of the subjects taught, and in the way they are taught, offer little of real value in helping prepare a youngster to meet his own individual problems of living in the second half of the twentieth century.

A recent study shows that out of every 100 children entering the fifth grade together, fewer than half graduate from high school. The highest record set was in 1948 with a percentage of 48.1. Furthermore, there is a sharp drop in high-school enrollment, from about 93 percent in the 14-15 age group to approximately 66 percent in the 16-17 age group.

Without question, economic pressures are a large factor in these "drop-outs." In many homes, as soon as a youngster can secure his working papers, he is expected to leave school and contribute to the family income. However, in a great number of instances these economic pressures do not obtain, or at least do not obtain to the same degree. Youngsters, passing the legal age limit for compulsory school attendance drop out either because they are bored and feel "they are not getting anywhere in school," or they are convinced that school can offer them no further specific help toward earning a living and they might as well start "drawing down a pay envelope."

During the past 4 years, Nation-wide interest in this problem has been stimulated by the Office of Education. For the year under review, in cooperation with the Office, the public-school systems in cities of more than 200,000 population are examining the curriculums to discover in what respect they can be altered to hold the interest of the potential "drop-outs." The results, when tabulated and evaluated, should do much to uncover some of the present weaknesses in our approach to secondary education.

These efforts are part of the movement sponsored by the Office of Education along with 12 national education associations to develop the theme of education for life adjustment. The movement was officially launched in 1947 at a national conference on the subject, which attracted wide attention throughout the country.

The aim of this movement is to adapt secondary education more closely to the needs of the 60 percent or so of youngsters entering high school who neither go to college nor enroll in vocational courses. The traditional view of secondary school as preparation for college entrance still restricts the horizons of much of our public-school system. Vocational training is only a part of the answer. What is needed is an *attitude of mind* which attempts to deal with each pupil in terms of his individual capacities and to help him explore his own potentialities.

An important objective is to overcome the feeling of inferiority which the "nonintellectual" student feels in grappling with some of his courses. No youngster, for instance, should be required to take a course in a subject-matter field for which he lacks the necessary ability, and then be marked as a failure, if he has done the best work of which he is capable. He may have other fields of competence. A combination of a part-time job, tied in with class-work design to interpret realistically the world he must live in, would not only sustain his interest but give him a genuine confidence in himself and his native abilities.

Beyond that, to teach a boy or girl to be a good citizen and member of society—to exercise practical judgment and sound common sense in relation to the many and sometimes difficult problems which, as

adults, they will be faced with—is education in its truest and most productive sense. And this is what education for life adjustment aims to accomplish. Such a goal cannot be achieved by rote or by the erection of intellectual standards which have little or no relation to everyday living. But it can be achieved by hard work, patience, and, above all, imagination on the part of the teacher and school authorities.

A program like this does not lend itself to any hard and fast proposals concerning the curriculum. Each school must work out its own problems in terms of the social, economic, and geographical factors involved. During the fiscal year, 1951, the second National Conference on Life Adjustment Education was held with delegates from many parts of the country in enthusiastic attendance. These delegates formally approved the activities carried on to date and requested an extension of them. Currently, some 20 State committees are engaged in stimulating interest in the program and many have reported real progress.

Within the Office of Education it is felt that Life Adjustment Education has a tremendous potentiality for good. There is a further conviction that the basic ideas as applied to high-school problems have implications for elementary schools and for colleges and universities.

THE CHANCE TO GO TO COLLEGE

Undoubtedly, one of the major matters which education must deal with during the coming years is the lack of opportunity afforded the qualified student to secure a college education. With 1,858 institutions of higher learning and an enrollment of some 2,500,000 young men and women, it would seem that we were making definite progress. In a very real sense, of course, we are. Statistics indicate that 38 out of every 100 high-school graduates are currently entering college. And though this ratio of college freshmen to high-school seniors is slightly lower than that of the 30's, the figures show that twice as many youngsters are now graduating from high school as during the depression.

Nevertheless, for every young man or woman who enters college it is estimated that there is another—equally qualified and probably equally anxious to secure a college education—who is denied the opportunity. For the most part, the economic factor is crucial since the great majority of the young people, denied their chance, come from families in the lower-income brackets which cannot finance the steadily mounting costs of a college education.

Racial factors also play a part. In the 17 States where segregation is required, there are only 108 Negro colleges or institutions of higher learning with a total enrollment of 76,500. (This enrollment figure, however, represents a 2,800 percent increase since 1900.) Beyond this,

the factor of economic discrimination operates more heavily against the Negro youngster than the white youngster, since approximately 80 percent of all Negro families (nonwhite) in the South, according to the 1950 census, have an annual income of less than \$2,000, as compared with about 50 percent of all families in the same area.

Geographic discrimination also has a large bearing on the matter. Young people from the lower-income family who live in, or near, the communities where the State universities are located have a better chance than those living at a greater distance. They, at least, can live at home or commute to classes, thus saving the considerable cost which college residence entails in board and lodging.

These forms of discrimination are, of course, palpably unfair in a democracy which professes the ideal of equal educational opportunity for all. But in broad terms of the national interest, they are even more to be deplored. By refusing full educational opportunity to a group equal in number and ability to those who do go to college, we are cutting in half the Nation's supply of potential doctors, engineers, teachers, and all the other scientific and professional people who perform great and useful service to our economy. With a constantly expanding industry there is an increasing demand for technicians with top-level training. Research in all its branches—medical, scientific, sociological—is stymied for lack of a sufficient number of trained research workers. A wide variety of important social services are also in need of college-trained personnel. And how many first-rate teachers and doctors are lost to our communities because they cannot finance their education beyond high school!

Not every college graduate by any means, of course, enters one of these professions or looks for technical training in the industrial field. In these days, however, college training is increasingly regarded as essential for any young man or woman entering business who hopes to make his way up the ladder of success. There are still plenty of opportunities for the smart youngster to "crash the gate" and win through to a substantial income and place in life. But these opportunities are becoming fewer and fewer, as the large corporations and business enterprises depend more and more on college-trained personnel for all responsible jobs.

The Office of Education has urged the provision, by State and Federal grants, of financial aid to able and needy students in higher education. In part, this aid might take the form of self-liquidating loans, guaranteed by the Federal Government. A legislative proposal entitled "The Student Aid Act of 1950" was introduced with the President's approval in both houses of the Eighty-first Congress, but no action was taken, due to the outbreak of the Korean conflict. The proposal is now being revised in the light of the new situation.

The long-term problems in education arising out of the international crisis only emphasize this need for scholarships. The provision of scholarships for qualified students was one of the important elements in the recommendations—made by the Office and concurred in by the Department of Defense—with respect to the deferment of college students under the Selective Service regulations. These recommendations were not finally incorporated in the revisions of the Selective Service Act.

From another angle, the Office has been attacking the problem of lack of opportunity to enter college by urging the establishment of community or junior colleges in every community of any size throughout the country. Such a program would cut down the geographical as well as the other discriminations that now obtain and, generally speaking, provide the same ease of access to higher education that now exists for secondary education. In addition, these community colleges would be designed to meet the continuing educational needs of younger and older adults—needs not normally met by the established colleges and universities.

There are now some 250 public junior colleges (grades 13 and 14) with a total enrollment of around 190,000, and perhaps an equal number of private junior colleges with probably double this enrollment. But, inevitably, most of these colleges have been established in the wealthier communities where need for easy access to education is less pressing. Obviously, we have a long way to go before the geographical barrier to a college education is overcome.

Aside from all the factors already analyzed, there still remains the thesis that the Nation needs as broad a base of an educated and informed citizenry as it can possibly acquire. Surely, one of the best ways to demonstrate democracy in action is to make certain that no American youth—whatever his economic, racial, or geographical status—is denied the opportunity to develop his talents to his own highest possible level.

EDUCATION FOR INTERNATIONAL UNDERSTANDING

The Korean crisis makes all the more urgent the need for our youth to have a better understanding of the world they live in. The ability to relate newspaper headlines to the undercurrents of international relationships should be one of the important objectives of elementary, secondary, and higher education. An understanding of conditions in other countries—how people live, what social and economic problems they face is also an essential. Moreover, it is only as children begin to get a sense of all these things that they can understand the basic conflict which exists between democratic and totalitarian ideologies, and the real significance of America's leadership among the free nations of the world.

Instruction in international understanding, based on the concept of the United Nations, is increasingly becoming a part of modern high-school curriculums. Over the past several years, the Office of Education has worked closely with State boards in developing teaching methods and materials for this instruction. In particular, students are learning about the United Nations Educational, Scientific and Cultural Organization (UNESCO): what this organization is trying to accomplish; what it is accomplishing; and how its basic objectives are related to their future and the welfare of the people of all nations.

From the time UNESCO was first organized, the Office of Education has maintained a vital interest in its work. In November 1951, the Commissioner of Education served as head of a delegation to Montevideo, sponsored by UNESCO and the Organization of American States, to consider means for extending compulsory free schooling and fundamental education programs for adults in the American Republics. An Office expert on literacy was in India on a UNESCO mission in 1951, after having undertaken a similar mission in 1950 in Haiti. *The Treatment of International Agencies in School History Textbooks in the United States*, published in 1950, was the result of a study made by another staff member of the Office of Education, under the sponsorship of the Office, UNESCO, and the American Council on Education. Also, at the request of UNESCO, the Office sponsored a project on literacy education and compiled a set of instructional materials for persons of low literacy levels. This material, published after 2 years of use and testing in classes for illiterates in this country, should prove highly valuable in combating illiteracy in other quarters of the globe.

As part of the effort to promote international understanding, the Office of Education administers a Teacher-Exchange program financed with funds transferred from the Department of State under Public Laws 402 (80th Cong.), and 584 (79th Cong.). During the past year, 127 teachers from Great Britain and other foreign countries taught in American schools, while an equal number of American teachers taught in schools of foreign countries. In addition, 27 Americans were sent abroad for nonexchange positions under Public Law 584.

Under the Cultural Exchange Program for Occupied Areas sponsored by the Departments of State and of the Army, the Office planned and supervised the visits of 257 teachers and educational leaders from Germany, Austria, Japan, and the Ryukyu Islands. It also received and planned itineraries for some 100 other foreign visitors who came to this country to observe American educational methods and institutions. And on behalf of American colleges and universities,

the Office evaluated the credentials and background of some 4,000 foreign students coming to study in this country.

Fellowships under the Buenos Aires Convention were awarded to 32 students from Latin America and another 85 received travel and maintenance grants to study in this country. Fourteen students from the United States received fellowships to study in various educational institutions of the American Republics.

The year 1950-51 saw an expansion of the Teacher-Training Program to include teachers in countries other than Latin America, and grants were made to 201 teachers from 42 countries to study and observe educational methods in the United States. Nine other grants were made under the Point IV program of the State Department.

The Office also undertook to help plan and recruit personnel for various educational projects under the Point IV and Economic Cooperation Administration programs of technical assistance, and 13 men and women were assigned as educational experts in missions established in Iran, Burma, Indonesia, and Thailand.

The value of these various exchange programs to increased international understanding cannot be too highly rated. The hundreds of men and women who are enabled each year, through this means, to come to the United States from foreign countries receive an inestimable opportunity to study American democracy in action—to learn our ways of life, our habits of thought, our methods of going about things. In turn, we discover to what extent their ideas and customs differ from ours, and to what extent they are fundamentally the same. All this helps to dispel prejudice, broaden the understanding, and through the powerful medium of the classroom, establish a genuine bridge between our people and the peoples of other countries.

THE CHALLENGE OF TELEVISION

No invention of recent years offers a greater potentiality than television for the development of new and effective methods of teaching. It is of vital importance that our schools and colleges recognize *now* this potentiality and take steps to see that television broadcasting is fully utilized for educational purposes.

It is only within the past year that any official determination has been made as to the allocation of TV frequencies for educational use. From November 15 to March 1951, public hearings were held before the Federal Communications Commission on the matter. The Commissioner of Education, together with a number of representatives of the educational organizations and public-spirited citizens, was asked to testify at these hearings. He urged strongly that, wherever all available channels in the present very high frequency band have not already been assigned, one should be reserved in each broadcast area for exclusive assignment to educational station applicants; and that

for channels in the ultra high frequency band (none of which had then been assigned) similar protection should be afforded.

The FCC's rulings on these points have been encouraging. Of the 2,000 TV stations—VHF and UHF—which the Commission proposes to authorize, 209 have been tentatively reserved for educational use. However, commercial television whenever affected is strongly opposed to these set-asides, and unless education indicates clearly its intention to make use of these facilities, there will be heavy pressures on the Commission to rescind these assignments.

This is reminiscent of what happened during the early days of radio in the 20's. At that time, certain of the limited number of wavelengths were assigned to schools and colleges. Many institutions which had taken up those licensed solely for public relations purposes soon discovered they had accomplished their original purpose and relinquished them for commercial operation. Only 30 such pioneers are active today. It was not until the advent of frequency modulation, with its wide range of wavelengths, that educational institutions were given the chance to recover part, at least, of their lost opportunities.

This same sort of pressure will inevitably be felt also in television. Unfortunately, education cannot move so swiftly as business and industry to take advantage of new developments in the field of communication. With most schools and colleges, cost will be a crucial factor. In the case of publicly supported institutions, in order to float a successful bond issue for the purpose it will probably be necessary, in many communities, to persuade the taxpayers that the project is an essential in the development of modern educational methods and not merely a "fancy trimming." But the dollars and cents value can usually be demonstrated without much difficulty.

An alternate suggestion is for schools or colleges to operate the proposed stations on a semicommercial basis. Under this plan, advertising revenue from strictly commercial programs would be limited to the amount necessary to cover operational costs, and the station would retain full freedom to allocate whatever time was left for its educational program responsibilities. Iowa State College is already operating such a station with a regular commercial license, the only kind available when it applied in 1948. There is question whether the FCC will permit educational stations to broadcast commercial programs.

On the basis of past experience with commercial radio stations and networks, however, any idea that the educational needs of a school or college can be met satisfactorily by commercial television on a "public service" basis must be flatly discouraged. Unless they can secure actual revenue from each program, neither a network nor a local station

can offer continuing guarantees as to time or coverage. As in radio, sustaining programs of an educational nature are likely to be shifted from hour to hour of the schedule or perhaps abandoned entirely, according to opportunities afforded to sell the time for a commercial program. An established schedule of fixed hours, at the times best calculated to reach the classroom or the home audience, is essential to educational programing. Experience shows that only a station which can control its own programing for this purpose can possibly do an effective job.

In the meantime, the importance of laying plans now and of applying for a license to operate a station on one of the "reserved" channels cannot be too strongly emphasized. New York has already moved to ask the FCC for 11 educational channels within the State and is prepared to pay something like \$3.5 million for the building of transmitters. In all, 28 school systems, 2 teachers colleges, and 1 university are now using television as an instructional aid in the classroom. However, more than 40 other institutions of learning are providing programs for general adult educational purposes over present stations. Beyond this, 360 institutions of learning have signified their intention of using, either singly or cooperatively, the frequencies available to them for educational purposes.

It is to be hoped that some of the privately endowed foundations, such as the newly established Ford Foundation, will undertake to make much-needed research studies into the most effective use of TV for educational purposes, and to help develop suitable programs. Without question, television offers a far greater advantage in the field of education than radio could ever hope to offer. It provides the essential visual element which, in the development of visual aids in teaching and the utilization of educational films, is recognized today as one of the most effective factors in successful teaching. It also possesses the advantage of seeing and hearing *at the time* an event, a lesson, or a demonstration is happening. The amount of money required to establish and operate a TV station for educational purposes should be regarded as an investment for necessary plant equipment. It is an investment that will be repaid many times over in the increased efficiency of school or college operation, and in the greater impact on the minds of the pupil which this method of teaching provides.

EDUCATION AND THE NATION'S STRENGTH

United States participation in World War I lasted 19 months. We were in World War II a little over $3\frac{1}{2}$ years, with a preceding defense economy covering a period of another year and a half. In both instances, the entire resources of the Nation were, to a large degree, concentrated on one objective—victory, with the expectation that after the victory, we could go back to "normal."

The present international crisis creates a radically different problem. Short of all-out war, the crisis may continue over a long span of time without being resolved in any clear-cut fashion. Periods of tension may give way to periods of merely "watchful waiting," to be followed by even more acute tensions. At no moment shall we be able to relax our guard.

We may, of course, be closer to a third world war than we are willing to admit, and the speed of our defense mobilization must be geared to that contingency. But even if—as we hope—we are able to avert the final catastrophe, we must prepare, together with the other free nations, to concentrate our strength and our resources to resist aggression wherever it may occur, in whatever quarter of the globe.

But in accepting this long-term responsibility of military preparation and all that goes with it, we also accept another responsibility—to preserve the great social advances we have made in recent decades. Above all, we must make sure that, for the critical years ahead, the education of our young people is given the highest possible priority in our national economy. Otherwise, we cannot rally our full strength to meet the developing threat to our fundamental liberties.

For its material needs the Nation's military and productive strength rests on the flow of young men and women who have a solid educational background into both our labor market and our armed services. Modern warfare, no less than modern industry, demands a high degree of mechanical knowledge and adaptability for which only our high schools can provide the basic training. Broadly speaking, a GI without such training is under a substantial handicap in acquiring the specialized skills needed to make him a top-rate soldier. And the same holds true for a worker in a defense plant.

Furthermore, we are wholly dependent upon our colleges and universities to give us the men trained in engineering, electronics, and the other sciences vital to the conduct both of a war and of defense production. This applies also to the doctors, dentists, and other professionals needed to keep our servicemen and workers physically in shape.

Failure to maintain the educational facilities of the Nation at their present level of effectiveness, or to expand and develop those facilities in every way possible, is to undermine our essential military and industrial strength. New school construction is but one index of the Nation's educational health, but it is a vitally important one. As part of our mobilization for defense we must face this problem squarely and set the same definite goals for its solution that we have set for the creation of a necessary army, navy, and air force. We must be prepared to state—and to act on the assumption—that the construction of a new schoolhouse is no less imperative, *as a defense measure*, than the construction of a new bombing plane; and that during the long

period of continuing crisis that lies ahead our educational plant is every whit as important as our military plant.

By the same token, we must be prepared to state—and to act on the assumption—that the recruitment and training of an adequate teaching staff for our public schools is no less imperative, as a defense measure, than the recruitment and training of young men for our armed forces. Other factors, of primary importance in the strengthening of our educational system, press for attention. All of them represent areas which demand study and research no less intensive than that applied to the production of new weapons, and action no less decisive than the creation of the atom bomb. The investment required to accomplish these objectives would still be only a small fraction of the billions we are spending for strictly military matériel. And every dollar spent for this purpose can be easily justified in terms of the long-range aspects of our national defense.

But the importance of education in our military and economic defense program is matched by its importance in the war of ideologies. Our citizens must be educated to think clearly about the issues of the present conflict. In the war of ideas, we cannot permit our enemies so to confuse us that we alter or destroy our own free institutions. This war of ideologies must be fought strictly with the weapons of democracy; any other weapons we may elect to use will, in the long run, backfire on us.

Certainly, the higher the level of education which the United States can achieve, the better are the chances for an informed and considered public opinion. For it is on such public opinion that we must ultimately rely in making the vital decisions of national policy we shall be faced with during the coming crucial years. To the extent that these decisions are the result of ignorance and prejudice they may endanger the very life of the Republic. Statesmanship of the most far-reaching sort cannot succeed unless it has the solid and intelligent support of the voters. And the effectiveness of our future leaders, whether in Congress or the county courthouse—will largely depend on the intelligence exercised by the electorate in their selection.

For this reason, the American people must grasp the danger of those forces at work in our society which are attempting to undermine its educational foundations. Recent events in several American communities, relating to the administration of the public schools in those communities, emphasize this necessity. Some taxpayers in these communities have made an issue of "modern education" and have rebelled at spending money for what they consider the "frills" in school administration and instruction. These budgetary considerations have been seized upon by some of the more reactionary forces in the community in an attempt to curb the development of education for genuinely democratic ends.

The appeal to ignorance and prejudice, in all their ugliest manifestations, has been used to discredit this "new-fangled nonsense," together with the sort of "smear campaign" that is increasingly being directed, within our body politic, against almost any form of liberal opinion.

The immediate danger is that school officials in other communities who are sincerely convinced of the usefulness of these modern methods will hesitate to risk an open assault on their judgments. Fear of expressing an outright opinion on a controversial subject will cause them to cling to their safe and old-fashioned methods. Education itself—whose very purpose is to dispel ignorance and prejudice—will be the victim of what, in essence, is an attempt to undermine our democracy by those forces of reaction which thrive on prejudice and ignorance.

Today, the United States and the other free nations of the world are facing a greater threat to their existence than in any other time in recent history. The basic conflict of the century is the struggle between the concept of democracy and that of the totalitarian state. Against the armed might of Soviet Russia we can match—and more than match—our own armed might. The sinister thrust of totalitarian ideas can be met only by free men whose convictions are deeply rooted in the democratic philosophy.

Education serves the cause of freedom and democracy more directly and more effectively than any other aspect of modern civilization. And few things contribute more to the dignity and essential worth of the individual. The opportunity offered our young people to obtain as much true education as they are capable of profiting from is, in a very real sense, the measure of our democratic strength. For the years ahead, education must stand as our chief weapon against the forces of darkness that inflict the age.

Work in Progress

NOTE: A detailed summary of the activities of each of the Divisions of the Office was in preparation at the end of the fiscal year, copies of which may be secured by writing to the Office of Education, Federal Security Agency, Washington 25, D. C., and specifying the particular summary or summaries desired. The brief résumé which follows suggests the range of these activities and highlights some of the more concrete accomplishments.

Much of the pressure on the comparatively small Office of Education staff comes from the requests for advisory and consultative services which the Office renders in a wide variety of educational fields. Staff members have a heavy correspondence schedule. Inquiries of all sorts are addressed to the Office, many of a highly technical nature demand-

ing a considerable amount of research to formulate the answers. School authorities and officials of educational organizations come to Washington to "talk over their problems." And staff members receive a large number of invitations to address conferences or to take part in work-shop panels which often involve a great deal of time-consuming preparation and travel.

During 1950-51, the normal pressure was greatly increased as a result of the many school and college problems arising out of the Korean crisis and defense mobilization. Moreover, it was necessary to assign a considerable portion of the staff personnel to the new defense programs initiated within the Office—such as, for instance, those connected with the claimant agency responsibilities—and in consequence much of the regular Office schedule was sharply disrupted.

In the preceding pages reference has been made to a number of studies and projects undertaken during the current year and also to the range of international activities. In addition, a large body of work was accomplished dealing with a variety of problems, all of it closely related to the continuing problems of American education.

STATE AND LOCAL SCHOOL SYSTEMS

The Office continued its work on basic problems connected with the administration of State and local school systems. Another in the series of studies on State departments of education, entitled *The Financing of State Departments of Education*, was completed. The first Nation-wide survey by the Office on the nature and extent of school transportation in cities was completed and published.

Two studies on the financing of schools were completed. One was the biennial study of Federal Government funds for education for the years 1948-50. The second was concerned with State provisions for financing public-school capital outlay programs. Work was also begun on the school expenditures survey, last made in 1939-40.

In the field of elementary education, the Office continued to focus on improving teaching practices and techniques. Staff members visited 35 school systems for research material. Several studies designed to aid teachers in various aspects of their work were published; 2 were issued for the benefit of parents; and at least 21 magazine articles or chapters for professional yearbooks were prepared.

A very substantial publication, entitled *Vitalizing Secondary Education*, was issued. This was a report of the first commission on Life Adjustment Education for the 3-year term for which it was appointed. Staff members developed the questionnaires sent to 38 school systems in connection with the "drop-out" problem.

Three other major publications were issued, *Learning To Supervise Schools*, *Education of Visually Handicapped Children*, and *Keystones to Good Staff Relationships*. An intensive study of the work

methods of school principals was made, and also a study of the professional training given librarians. In addition, a large number of statistical studies were published in connection with the *Biennial Survey of Education*. And a catalog was issued listing nearly 400 films produced by, or for, various Government agencies which have been cleared for television rights.

One highly important project was a study of the total enrollment of pupils in all subjects in secondary schools for the second semester of the year 1948-49. The last investigation of this type was made in 1933-34. The survey shows concretely the changes that have taken place during the last decade and a half and demonstrates that these changes are definitely in the direction of more functional education and represent an effort to meet the life needs of increasingly diverse groups of pupils.

Major conferences at which staff members concerned with State and local school systems played an active part included the National Conference for the Mobilization of Education, the Fifth World Congress of the International Society for the Welfare of Cripples, the Midcentury White House Conference for Children and Youth and the Conference on Aging, the last two of which were sponsored by the Federal Security Agency.

VOCATIONAL TRAINING

During 1950-51 the Office of Education was active in administering the Smith-Hughes and George-Barden Acts under which approximately \$26,000,000 of Federal funds were allotted to the States for the promotion and further development of vocational education and for which an additional amount of approximately \$100,000,000 of State and local funds were used for vocational education in approximately 14,000 public secondary schools.

In determining the policies and procedures for the administration of vocational education, the Division of Vocational Education had the services of two groups of State personnel: The National Policy Advisory Committee for Vocational Education, composed of four Chief State School Officers who are Executive Officers of State Boards for Vocational Education and four State Directors of Vocational Education; as well as the Working Advisory Council consisting of eight State Directors of Vocational Education.

In cooperation with farm equipment manufacturers and oil companies, the Division developed 18 manuals on the care and maintenance of modern farm machinery for the use of vocational agriculture teachers and students. It also had the satisfaction of seeing The Future Farmers of America reach a record membership of 340,090. This national organization of farm boys enrolled in agricultural vocational classes has been sponsored by the Office since 1928.

The Home Economics Education Service organized and conducted two major national conferences during the year—one for teacher training in this field and the other for State and city supervisors. It also conducted an inter-regional conference for heads of Home Economics Education from 17 States, and cooperated with the Future and New Homemakers of America in conducting three leadership training conferences for their members. In addition, the Office sponsored a national conference of guidance supervisors and counselors at which 30 States were represented, and a variety of technical publications in this field were issued.

Special attention was given to assisting the various States in the planning, organization, and operation of training courses for practical nurses. A publication dealing with curriculum for the training of practical nurses was prepared in cooperation with the medical profession, professional nursing organizations, and vocational educators. Other activities included the development of instructional material dealing with training in food preparation in cooperation with the National Council on Hotel and Restaurant Education. Also, two of four projected studies of trade and industrial education were made on a cooperative basis by the Division, National and State representatives of the American Federation of Labor, and State vocational education staffs in Alabama and California.

Still another important activity has been in the field of adult distributive education. The Office is working closely with the various States in developing a training program in this field which will be published shortly. Continuing a project started a number of years ago, a series of vocational business tests were revised under the joint auspices of the United Business Association and the National Office Management Association. These are for use in both secondary schools and colleges and also by business firms, Government agencies, and other organizations.

HIGHER EDUCATION

In the field of higher education, the Office is increasingly concentrating its efforts upon basic problems which usually involve the cooperative work of several staff members. During 1950-51, a major survey, begun in the previous year, was completed and the findings published under the title, *Study of the Structures of the Tax-Supported System of Higher Education in Illinois*.

The improvement of the quality of instruction in colleges and universities is another area of research. In December 1950, a conference of 100 college teachers and administrators on The Improvement of College Faculties was cosponsored by the Office and the American Council on Education, and the report of the proceedings, prepared

by the Office, was published by the Council. Several studies were made in specialized fields, such as the teaching of dentistry, pharmacy, and engineering. A staff member collaborated with the American Political Science Associates in writing a fairly exhaustive report on the *Advancement of Political Science Teaching*. And a pamphlet was prepared relating to the organization and teaching of college introductory courses in United States history.

The Office also, during the spring of 1951, assembled information as to the number of college teachers who were likely to lose their appointments because of the expected decrease in college enrollments resulting from Selective Service inductions. This information proved immensely valuable to the Ford Foundation and other agencies which set in motion various projects designed to help these displaced teachers make the necessary readjustments.

A number of other fact-gathering assignments were also undertaken. Among the more important were: A survey of the need for personnel workers in the armed forces; a manual of certification requirements for school personnel; the annual Directory of Higher Education containing the names of all principal administrative officers in the 1,857 colleges and universities in the United States, together with other important material: data on available scholarships and fellowships; a study of engineering enrollment; and a survey of undergraduate economics classes.

As part of its statutory responsibilities, the Office assembled and examined the annual reports of the 69 land-grant colleges and universities and certified their respective shares of the Federal appropriation. It also made its annual inspection report to the Federal Security Administrator on Howard University, as required by law.

RESEARCH AND STATISTICS STANDARDS

Activities of the Office included the preparation of the *Biennial Survey of Education in the United States*—a continuous statistical program of the Office begun in 1870. The 1948–50 survey will include the four regular chapters covering the Statistical Summary of all education, State (elementary and secondary) School Systems, City School Systems, and Institutions of Higher Education. It will also include a National Summary of Offerings and Enrollments in High-School Subjects for 1948–49, covering enrollments in 274 subjects (noted above); and Statistics of Public Libraries. In this connection, all States were visited by staff members to promote more uniform records and accounts and obtain complete coverage for the biennial studies.

In addition, the annual statistical reports were made for Land-Grant Colleges and Universities; for the Fall Enrollment and De-

grees Granted in Higher Education; for Enrollments and Degrees in Schools of Engineering; and for Expenditures Per Pupil in City School Systems. Work was begun on an annual study of Finances of State Colleges and Universities in cooperation with the Bureau of the Census, U. S. Department of Labor. And a pilot study on the Economic Status of Teachers was made in cooperation with the Department of Labor.

Materials were also prepared for the White House Conference on Children and Youth at the Midcentury; for the congressional study of Low-Income Families and Economic Stability; for the hearings on the Universal Military Training and Service Act of 1951, in relation to the effect that various proposed sections would have on the supply of college-trained men; for the Council of Economic Advisers through the Program Office of the FSA; for the Commission for Public Schools in New York; and for the statistical organization of the United Nations.

Field consulting service on more uniform records and accounts was continued with the directors of school finance of the 17 Southern States in Atlanta, Ga., and with the National Association of School Business Officials in Chicago, the Alabama Association of School Administrators at Auburn, Ala., and the Association of College Registrars and Administration Officers at Houston, Tex. Work with the State Departments of Education in Minnesota and Michigan and the City Department of Education in Boston resulted in 2 new State Manuals of School Accounting and a greatly simplified revised school budget for Boston.

PROGRAM DEVELOPMENT AND MANAGEMENT IMPROVEMENT

On the Program Development and Coordination Branch, established under the reorganization plan of February 1951, rested the responsibility for coordinating the plans to be projected in fiscal 1953, as well as review of the plans for fiscal 1952. The lapse of 15 months between the completion of plans for budget purposes and the passing of appropriation acts to carry out the plans makes necessary a continuous review and reconsideration of program, as a dynamic situation presents new problems.

In addition, a number of specific accomplishments in the field of management improvement can be recorded. These include: The centralization of control of conference funds; improvement in editorial services; more effective utilization of mailing lists; the initiation of a readership survey of **SCHOOL LIFE** to determine its editorial effectiveness in relation to other school and educational publications; and an evaluation of the foreign student credential service to colleges with a view to lightening an increasingly heavy work-load.

Publications Issued by the Office

Bulletins, Pamphlets, Etc.

Federal Government Funds for Education, 1948-49 and 1949-50. Bulletin 1950, No. 3.

Frustration in Adolescent Youth. Bulletin 1951, No. 1.

Culloden Improves Its Curriculum. Bulletin 1951, No. 2.

Vitalizing Secondary Education. Bulletin 1951, No. 3.

Statistics of Land-Grant Colleges and Universities, year ended June 30, 1950. Bulletin 1951, No. 4.

Education Unlimited a Community High School in Action. Bulletin 1951, No. 5.

How Children Use Arithmetic. Bulletin 1951, No. 7.

Teachers Contribute to Child Health. Bulletin 1951, No. 8.

How Children Learn about Human Rights. Bulletin 1951, No. 9.

How Children Learn To Think. Bulletin 1951, No. 10.

A Directory of 2002 16mm Film Libraries. Bulletin 1951, No. 11.

School Fire Safety. Bulletin 1951, No. 13.

School Lunch and Nutrition Education. Bulletin 1951, No. 14.

Land-Grant Colleges and Universities—What They Are and the Relation of the Federal Government to Them. Bulletin 1951, No. 15.

Scholarships and Fellowships. Bulletin 1951, No. 16.

School Housing for Physically Handicapped Children. Bulletin 1951, No. 17.

Modern Ways in One- and Two-Teacher Schools. Bulletin 1951, No. 18.

The Activity Period in Public High Schools. Bulletin 1951, No. 19.

Education of Visually Handicapped Children. Bulletin 1951, No. 20.

3434 U. S. Government Films. Bulletin 1951, No. 21.

Life Adjustment for Every Youth. Bulletin 1951, No. 22.

Health Instruction in the Secondary Schools. Pamphlet No. 110.

Pupil Transportation in Cities. Pamphlet No. 111.

The Advisory Council for a Department of Vocational Agriculture, Vocational Division Bulletin No. 243.

Home Economics in Colleges and Universities of the United States. Vocational Division Bulletin No. 244.

Boys and Girls Study Homemaking and Family Living. Vocational Division Bulletin No. 245.

Summaries of Studies of Agricultural Education. Supplement No. 4. Vocational Division Bulletin No. 246.

Occupations. Vocational Division Bulletin No. 247.

Keystones of Effective Staff Relationships. Misc. No. 13.

Residence and Migration of College Students, 1949-50. Misc. No. 14.

Faculty Salaries in Land-Grant Colleges and Universities, 1949-50. Circular No. 283.

Learning To Supervise Schools. An Appraisal of the Georgia Program. Circular No. 289.

A Manual on Certification Requirements for School Personnel in the United States. Circular No. 290.

Improving School Holding Power. Circular No. 291.

Expenditure Per Pupil in City School Systems. Circular No. 292.

Holding Power and Size of High Schools. Circular No. 322.

Pupil Personnel Services in Elementary and Secondary Schools. Circular No. 325.

Identifying Educational Needs of Adults. Circular No. 330.

Biennial Survey of Education in the United States, 1946-48

- Statistical Summary of Education, 1947-48. Chapter 1.
- Statistics of City School Systems, 1947-48. Chapter 3.
- Statistics of Higher Education, 1947-48. Chapter 4.
- Statistics of Nonpublic Schools, 1947-48. Chapter 7.
- Statistics of Public School Libraries, 1947-48. Chapter 8.

Biennial Survey of Education in the United States, 1948-50

- Offerings and Enrollments in High School Subjects, 1948-49. Chapter 5.

Education Directory

- Federal Government and States, 1950-51. Part 1.
- Counties and Cities, 1950-51. Part 2.
- Higher Education, 1950-51. Part 3.
- Education Associations, 1950-51. Part 4.

Miscellaneous

- Annual Report of the Federal Security Agency, Office of Education, 1950.
- Digest of Annual Reports of State Boards for Vocational Education, Fiscal Year ended June 30, 1950.
- Citizens Look at Our Schoolhouses.
- Index, SCHOOL LIFE, Vol. XXXII, October 1949-June 1950.
- Some Questions on the Education of Physically Handicapped Children and Youth.

Periodicals

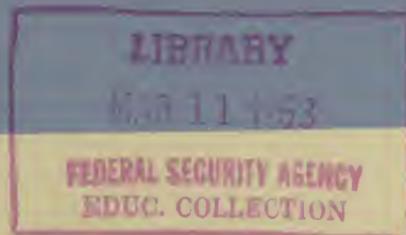
- SCHOOL LIFE (9 issues—October 1950-June 1951, inclusive).
- HIGHER EDUCATION (19 issues September 1, 1950-June 1, 1951, inclusive).



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Annual Report of the
FEDERAL SECURITY AGENCY

1952



Office of Education

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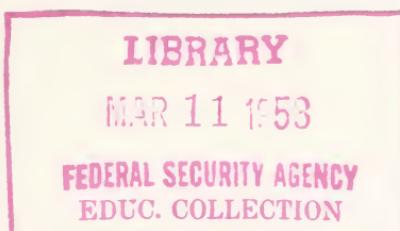
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Annual Report of the
**FEDERAL
SECURITY
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1952

U.S. Office of Education



FEDERAL SECURITY AGENCY

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OFFICE OF EDUCATION

EARL JAMES McGRATH, *Commissioner*

Deputy Commissioner of Education, RALL I. GRIGSBY.

Assistant Commissioner for Program Development and Coordination,
WARD STEWART.

Assistant Commissioner for Vocational Education, JOSEPH R.
STROBEL.

Assistant Commissioner for Veterans' Educational Services and
Director of the Scientific Register, JAMES C. O'BRIEN.

Assistant Commissioner for State and Local School Systems, WAYNE
O. REED.

Assistant Commissioner for Higher Education, W. EARL ARMSTRONG,
Acting.

Assistant Commissioner for International Education, OLIVER J.
CALDWELL.

Executive Officer, DONALD W. McKONE.

Letter of Transmittal

FEDERAL SECURITY AGENCY,
OFFICE OF EDUCATION,
Washington, D. C., October 30, 1952

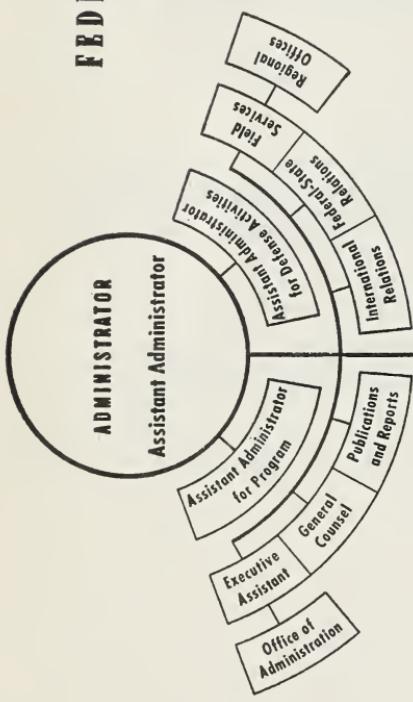
The Honorable OSCAR R. EWING,
Federal Security Administrator.

DEAR MR. EWING: I herewith submit the annual report embracing the activities of the Office of Education for the fiscal year ending June 30, 1952.

Respectfully,

EARL JAMES McGRATH,
Commissioner of Education.

FEDERAL SECURITY AGENCY



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Office of Education

IN RECENT YEARS the reports of the Commissioner of Education have gone beyond the activities of the Office of Education to deal with Nation-wide educational trends and problems. These more extensive reviews have sprung from a desire to comply more closely with the directive of the Congress to the Commissioner of Education to submit at the end of each fiscal year a report of his investigations in the field of education and to place before the American people a statement from a national source about those features of our educational system which deserve their consideration.

The report for the fiscal year 1952 conforms to this pattern. Though many activities of the Office of Education are described, they are placed within the broader context of more comprehensive reviews of major educational problems. It is hoped that this type of presentation will provide the Congress with an over-all view of the most important operations of the Office of Education as well as of the total American educational enterprise. Emphasis will be upon the condition of the educational system, upon American schools and the millions of American children and youth attending them, upon the problems of school personnel and plant as they affect our educational progress, and upon new educational opportunities and practices.

The Strength of the Nation Is In the Quality of Its Citizens

From the viewpoint of history, the fiscal year 1952 will probably be noted as a time when Americans began to settle firmly into their role of world leadership and commit themselves, at home and abroad, to the task of guarding the far-flung frontiers of democracy. Concern for the future of the free world dominates our national life. If we are to acquit ourselves well, the years ahead will call for an even more concentrated national effort, for the expansion of our productive capacity, for more rapid technological progress, and, above all, for the more intensive cultivation of the intelligence, the aptitudes, and the character of the individual citizen. The strength of this Nation is

composed of many ingredients, but the most important is the quality of its citizenry. Recognizing this fact, we become increasingly conscious of the decisive role of the school in shaping our Nation's future. The school is the reservoir from which must flow not only the technical skills but also the intelligence and the love of freedom needed to keep us strong in a world of conflict.

The critical world situation, however, is only one of the circumstances which compel us to deal with some of our educational problems on a national level. Domestic factors, too, are responsible. The growing integration of our society, the high mobility of our population, the virtual elimination of distance as a factor in communication, all of these have brought Americans more closely together. Hence, regional inequalities appear in sharper focus. Differences in educational opportunity between States or communities are more keenly felt. We become more clearly conscious that it is contrary to the national interest to fail to provide adequately for the children whose educational opportunities are severely limited, and we have many such children in the United States. Proper schooling would not only help many of them to grow up as self-reliant, productive citizens, it would also develop a source for the additional manpower which our Nation so badly needs. The educational agency of the Federal Government has a responsibility to make our people as a whole conscious of our present educational problems.

The Long History of Federal Support of Education

In terms of the life span of our relatively young country, Federal participation in education has a long history. In recent years, however, the areas of cooperation between Federal agencies and local educational authorities have increased considerably. A pattern for such cooperation is beginning to emerge and is likely, in the future, to affect our approach to many of the educational problems facing our people. It will be useful in this report to analyze the nature of this cooperation, discuss some of the programs that have been developed, review the educational tasks with which Americans must cope, and to restate some age-old principles.

The most important of these principles, and one which public opinion has never challenged, is that education in the United States is the responsibility of the States and local communities. This tradition is as old as the Republic itself and the years have proved its wisdom. Whether it reflected their recent unfortunate experience with a remote government or a deeper insight into the relationship between education and a free society, the founding fathers were, according to James Madison's notes of the Constitutional Convention of 1787, consciously agreed that the education of youth should properly

be left to local authority. The men whose ideals shaped the future destiny of the Nation were determined to keep our social and political institutions close to the people. They were fearful of any policy which would make it possible for a central government to dominate the thinking of the people, and thus undermine their individual freedom of thought and action.

Local Control of Education Has Brought Rewards

This fundamental policy with regard to education has been richly rewarding. Local control has stimulated popular interest in our schools. Americans have taken pride in the efforts made locally to educate their sons and daughters. They have considered it a right to have a voice in deciding what the schooling of their children should be. Generally they have proved willing to provide the means of maintaining their educational institutions. There have been exceptions. Some citizens and some communities have been, and still are, remiss in providing the necessary minimum of education for their youth. But in this respect they certainly do not represent the general American attitude.

Local responsibility has made education a vital force in American life. More than anywhere else in the world local efforts to make the educative process effective have brought a wide variety of teaching materials and methods into our schools. Out of these local variations in practice has come a body of teaching experience which has eventually proved useful throughout the Nation. True, not all communities have kept pace with educational progress. Some communities have clung to outworn educational ideas and methods. But the net effect of our national policy of local control has been the development of a vital, serviceable, and democratic school system. Contrasted with conditions in other lands where education is placed in a single governmental educational authority, the advantages of our decentralized system of control of education are easily apparent.

To summarize, local control keeps the schools close to the lives of the people; it stimulates and maintains their interest; it makes possible the expansion and growth of our school system along lines related to the needs of the local community; it keeps American schools steadily upon the road of progress; it preserves the freedom and democratic spirit of American education; it safeguards the liberty of our people. Surely there is no need to reemphasize here the soundness of the basic principle of State and community responsibility for education.

The question must then be raised: What responsibility does the Federal Government have for education in the United States? And if it does have any responsibility how can this be met without undermining the principle of local control of education? Abstract discuss-

sions of the problem are not likely to be fruitful. The situation must be considered in terms of the facts that exist today, the economic and social conditions which impinge upon education in the United States.

The record of Federal activity in education up to now will be instructive. In approaching this topic two questions may well be asked: How extensive has been the interest of the Federal Government in education? Has this interest proved detrimental to the preservation of local control or to the general well-being of education in this country?

The National Interest in Specific Types of Education

In answering the first question it should be pointed out that when the national interest appeared to be involved the Congress of the United States has on a number of occasions taken an active part in educational matters. The record will also show that Federal activity in the field of education has slowly but steadily increased over the years. When the Nation was young the National Government came into possession of extensive lands west of the Appalachian Mountains. Eventually when arrangements were made for the sale of these lands, provision was made whereby the sixteenth section of every township was reserved from sale and used for the support of public schools. As new States were formed from the public domain, the section grants for schools were confirmed to them. The Federal Government in those early days was interested in the general education needed by all youth if they were to grow up as intelligent and productive citizens.

Decades later, however, the educational activities of the Federal Government were related to more specific needs of the American people. In the middle of the nineteenth century Senator Justin Smith Morrill of Vermont became convinced that a new type of higher education was needed in this country, especially by the sons and daughters of the working classes, which would lead to employment in the agricultural and mechanical arts. Recognizing that the stimulation of such instruction was a national responsibility, the Congress passed, and President Lincoln signed, the Morrill Act in 1862. Subsequent legislation, over a period of years, has increased Federal support to the land-grant colleges and the agricultural experiment stations in the several States. The institutions benefited by these laws will testify that all this was achieved without imposing Federal control or interference.

More than half a century later another important Federal venture into the field of education occurred. Leaders in business, industry, and labor became aware that the United States was behind other countries in providing vocational training for its working people.

They joined with educational groups to urge the extension of opportunities for this type of education in the high schools of the Nation.

The Congress, recognizing that this was a national problem, enacted the Smith-Hughes Act of 1917. This act was followed in later years by several supplementary laws, the latest of which is the Vocational Education Act of 1946 commonly known as the George-Barden Act. This legislation has made millions of dollars available to the States on a matching basis, and it has also provided excellent consultative services. Without Federal aid, vocational education in the United States would certainly not have developed as fully as it has in the past 35 years. As in the case of earlier grants, Federal aid for vocational education has involved no attempt at Federal domination or interference.

The most recent Federal legislation, providing financial aid for education in certain localities, has been in effect for only 2 years. Public Laws 815 and 874 of the Eighty-first Congress, signed by the President on September 23, 1950, and September 30, 1950, respectively, were designed to discharge the financial responsibility of the Federal Government to communities affected by Federal activities and to provide funds for a survey of school plant needs throughout the Nation.

The story of this development goes back to World War I. But the problem really became acute during World War II when various branches of the Government, especially the Army, the Navy, and the Air Corps, rapidly acquired large parcels of local property for Government use which then became tax-exempt. In many localities large numbers of school-age children suddenly were brought into schools near military bases, compelling communities to make provision for two or three times their normal school population. The problem created by the Federal activities was clear. The first action to relieve the situation was the passage in 1940 of the Lanham Act which provided for aid to defense-connected areas in order that the war effort would not be impeded. Under the Lanham Act loans and grants were made available only where it was impossible for the school district otherwise to provide facilities and where the shortage of school facilities would clearly impede the war effort.

Federal aid for school construction under the Lanham Act ended shortly after the surrender of Japan. But large numbers of children were still found in the schools within war-affected areas and the problem of educating them remained critical. A temporary program providing Federal financial assistance for operating expenses of these schools was continued year by year. A number of Federal departments and agencies besides the Army, Navy, and Air Corps also gave such assistance to school districts. The variety of agencies and the

lack of a single Government plan for dealing with the problem on a Nation-wide basis caused the widest variation in regulations and in the amounts of the payments made to school districts.

The Eighty-first Congress took steps to bring order out of this chaos. The House Committee on Education and Labor, faced with the necessity of deciding how to meet the Federal obligation to these areas, concluded that a study should be made to determine the extent and degree of continuing Government impact. The Federal Works Agency and the Office of Education supplied a staff to assist a sub-committee which held hearings in federally affected areas throughout the country. Shortly after this investigation was completed Public Laws 815, covering schoolhouse construction, and 874, covering costs of the maintenance of schools in the federally affected areas, were passed. Experience has shown that, while these laws could be improved by minor amendments, they are essentially sound. Through the provisions of these laws the United States Office of Education, which is responsible for administering them, has been able to provide financial assistance to many school districts which otherwise would have been unable to provide adequate education for local children.

Safeguarding Local Control in Federal Participation

This, in broad outline, is the record of Federal activity in the field of education within the Office of Education. As the Federal Government has dealt with educational problems of national scope, a desirable pattern of relationships between the Government of the United States and the States and local communities has developed. The policies and practices developed under the existing laws show clearly that crucial national educational needs can be met with the assistance of the Federal Government without jeopardizing the principle of State and local control of education.

The record justifies the conviction that other educational problems, national in scope, can be dealt with through cooperative study and effort on the part of the educational agency of the Government and the State and local authorities. Certain problems of that type now exist. Some are already receiving attention; others are not. An examination of the present American educational scene and a look into the future will show that we have now entered a period in our national history when the Office of Education must take the initiative in organizing cooperative attacks on these problems. Indeed, the best interests of the school system of the Nation and of our people as a whole will not be well served if such leadership is not assumed in the days immediately ahead.

It is important that the Congress and citizens generally recognize the need for action on educational problems on a national scale. The

seven topics chosen for review are intended to be illustrative, not exhaustive. There are others which might have been chosen with equal propriety, but these will serve at once to show the need for national service by the Office of Education and, at the same time, they will set forth some of the principal activities of the Office of Education for fiscal year 1952. These illustrative problems are:

- (1) The need for school housing.
- (2) The need for more teachers.
- (3) The three R's.
- (4) Life adjustment education.
- (5) The education of children of migratory workers.
- (6) The education of exceptional children.
- (7) Educational television.

THE NEED FOR SCHOOL HOUSING

One of the most serious situations existing in the Nation today is the shortage of schools. States and municipalities vary widely in their capacity to build new schools in replacement of those which have become obsolete, or to add to their existing facilities to take care of the many additional children who are appearing at schoolhouse doors because of the recent rapid increase in the number of births in the United States. Related to the major problem of a shortage of school buildings are others of transportation of pupils, of reorganization of school districts, and of school finance.

It has, of course, been generally known that thousands of communities, in addition to the federally affected areas, suffer from a lack of school facilities and are therefore seriously handicapped in providing even the basic education required for citizenship. But no authoritative and comprehensive factual information of the total requirements on a Nation-wide basis has been established. The Eighty-first Congress wisely provided for a national survey of the need for new schoolhouse facilities in Title I of Public Law 815. Through this legislation the Office of Education, authorized to conduct such a national study in cooperation with the several States, launched this project in fiscal 1951.

The first phase of the survey of schoolhouse facilities was completed in fiscal 1952, and the facts established were sufficiently comprehensive and impressive to justify the Commissioner in reporting them to the Congress in April 1952. At that time the information gathered from 25 States made it possible to estimate the situation on a national scale with reasonable accuracy.

The facts revealed in the survey by the spring of 1952 are startling, if not alarming. To provide adequate classroom and auxiliary facilities such as gymnasiums and auditoriums for all the children expected to be enrolled in the public schools in the fall of 1952 would require

an expenditure of over 10 billion dollars. Moreover, many of the school plants now actually in use do not meet acceptable standards of fire safety; 40 percent of the school buildings are more than 30 years old and 16 percent are more than 50 years old.

That this is a national problem is clear from the fact that even the States with the most satisfactory facilities are in serious difficulties. In those States, too, the building shortage is severe and will grow worse in the years ahead as a result of the continuing rise in the number of births.

If it were possible to provide adequate school housing for all the Nation's children this year 10 billion dollars would be needed. Yet a conservative estimate by those reporting for the States surveyed indicates that only about half of the necessary funds could now be provided by States and local communities through the maximum utilization of bonding capacities. Some form of Federal assistance is imperative if the children of the Nation, regardless of where they live, are to have the advantages even of the basic education which Americans have traditionally considered their birthright.

It will be of interest to the Congress that the first phase of the study it has authorized is now substantially complete. The composite of State surveys drawn together by the United States Office of Education provides a comprehensive over-all picture of the current need for schoolhouse construction throughout the Nation.

The second phase of the survey will continue through fiscal 1954, and will consist of a State-by-State development of long-range master plans for school construction. This second phase will take into consideration future enrollment increases and population shifts and will determine the location, size, type, and timing of school construction projects needed by 1960.

Meanwhile, many State and local school authorities have been making an effort to construct the buildings necessary to meet the present and coming critical needs for new schools. During the fiscal year 1952 the Office of Education, under the Controlled Materials Plan of the Defense Production Act, issued permits and allocated controlled materials supporting educational construction valued at \$1,878,000,000.

This construction rate was possible during a period of material shortages because those persons in the Defense Production Administration responsible for policy decisions recognized the essentiality of education to the national defense and assigned to school construction a position second only to the direct defense agencies in the allocation of critical materials.

In fulfilling its responsibilities as the claimant agency for education under the controlled materials plan, the Office of Education has been able to approve all applications for construction designed to relieve

overcrowding, with postponement only of less essential types of construction, such as gymnasiums, auditoriums, and similar facilities. An estimated total of 49,500 elementary and secondary school classrooms were completed during the year. This number is short by 6,500 classrooms of the number needed merely to care for the 1,691,000 pupil enrollment increase between September 1, 1951, and September 1, 1952. During the fiscal year applications were approved for the construction of college and library facilities valued at \$327,000,000.

THE NEED FOR MORE TEACHERS

Inadequate school housing is obviously detrimental to a sound educational system. But there is another national problem of equally serious significance. It is the present inadequate supply of properly educated teachers. To get a true picture of the teacher shortage we must again look at the Nation as a whole. For, it could be shown that in certain favored communities, especially in urban areas, many children are attending classes with no more than 25 or 30 students, that the teachers in these classrooms have had a full teacher education program of studies, that they hold first-class certificates from State authorities, that school sessions run throughout the day, and that the curriculum is complete with such specialized or supplementary instruction as is needed. But for the Nation as a whole, such a picture would be false and it is just such a distorted view which may block progress. Only a complete survey of every hamlet and county of the Nation as well as of the big cities can reveal to the citizens of this country the seriousness of the present teacher shortage. More important, it will show how inevitably the present situation must become worse in the immediate years ahead.

Even with the incomplete information available at present, however, the picture is disturbing. To bring this problem into sharper focus, let us look at two sets of facts placed in juxtaposition: the birth rate of the Nation, and the annual number of graduates of our teacher-training institutions.

In the early forties, the sharp upward curve of the national birth rate was generally regarded as a war phenomenon from which a return to normal was expected at the war's end. However, all of the years since the end of hostilities in 1945 have shown a consistently high birth rate. The result will be felt acutely in September 1952, when the elementary schools will be called upon to enroll 1,691,000 more children than a year earlier. From now on, until at least 1957 or 1958, each autumn will find hundreds of thousands of additional children waiting before the school doors of the United States. These figures take into account only the children already born, and no serious student of population problems envisages a sudden decrease in the number of births in the immediate future. Thus, with the lower

grades already crowded to the bursting point, the continued high birth rate will engulf an additional higher grade each year.

As a parallel to the steadily increasing annual enrollments in our schools, the attention of the Congress is directed to the situation in the colleges and universities where teachers are trained. It is estimated that the need for additional teachers in our schools for the year 1952-53 will be at least 160,000. This is the number required to fill the places left vacant by those who will have retired, died, left the profession because of marriage or to seek more attractive employment, and to provide for the increased enrollment. To meet this need our teacher-training institutions have this year graduated only 106,000 teachers, 96,000 at the A. B. degree level, and 10,000 below degree level yet meeting certification requirements in some of the States. An estimate of the student enrollment in institutions preparing teachers indicates that the number of graduates will not increase in the years immediately ahead. In a few years, the teacher shortage now so acute in the elementary schools will extend to our high schools. The present apparent oversupply of teachers in some fields in the high schools is distinctly a temporary phenomenon which will quickly change to a shortage as the present large population in the lower age groups advances upward in the school system.

The American people must face the stern reality that this dismal situation cannot, with the best will in the world, be changed much in the next 3 or 4 years. Teacher education, like other education, cannot be a makeshift affair. It involves a process of maturing for which there is no adequate substitute.

Yet for the next few years emergency steps must be taken to relieve the present situation as much as possible. Already a dozen States have established programs to retrain and bring into elementary schools, teachers who had prepared to teach in high school, or who were graduated from a liberal arts college without special preparation for teaching. Several other States have set up programs for teacher reserves, designed for qualified persons who may have taught school earlier in life but allowed their certificates to expire, or for others who have met most but not all of the qualifications for teaching. Some colleges and universities have established special programs to bring these people up to the minimum standards before placing them in the classroom. These and other makeshifts, of necessity, can be used temporarily but they are no final or proper solution.

We must now plan ahead 5, 6, or more years for a permanent and satisfactory solution to the teacher-shortage problem. We must begin now by securing answers to certain fundamental questions: What is behind the lack of interest of American youth in teaching as a pro-

fession? How can we increase enrollment in teacher-training institutions? How can we keep trained teachers in the schools?

Many of the facts which account for the lack of interest of American youth in the teaching profession are known. There is, for example, the matter of inadequate compensation. Salaries of teachers have always been low compared to other occupations requiring education beyond the high school. In recent years, however, while the educational requirements for teaching have risen, the salaries of teachers as compared with those in most other professions and vocations with less exacting requirements have declined even further. In many States and communities salaries compare unfavorably with incomes in occupations requiring little or no formal education beyond the elementary grades.

There are other factors which are probably influential in making the life of a teacher unappealing to many young people. In some communities, especially in rural areas, the personal and social lives of teachers are placed under restrictions which do not apply to other citizens. And some forms of these restraints seem to be expanding. Infringements on freedom of expression and of teaching, for example, exist to a degree which alert young professional workers find difficult to accept. The notion that members of one profession—teaching—must be singled out to make an official declaration of their loyalty to the United States seems to many to imply an atmosphere of suspicion and surveillance which Americans of independent minds and freedom-loving spirits will not tolerate. There is no more loyal group of citizens in this country than the educators. In short, many young people, who would have found in teaching an opportunity for service, are discouraged from entering a profession in which the reward is too often likely to be public criticism and suspicion, personal frustration and annoyance, little security, and low pay.

The facts related so far are easily visible from the surface. Actually, however, the forces at work in creating the present teacher shortage are most intricate and require deep analysis.

A Nation-wide study is urgently needed: To determine State by State such things as the extent of the shortage, the rates at which teachers leave the profession for various reasons, where teachers come from, what their salaries are in various types of communities and teaching positions, and why more young people are not entering the profession. Complete and reliable information of this sort will be required before the present disturbing situation can be corrected.

A survey of the teacher shortage and related matters, like that for school facilities under Title I of Public Law 815, Eighty-first Congress, is needed before effective action can be taken on a Nation-wide basis to recruit and keep in the profession the numbers and the types

of young people needed to provide a satisfactory education for all American children regardless of where they live.

This study should be a cooperative enterprise, involving the Office of Education, the State departments of education, educational associations, and colleges and universities. If the survey of school facilities may be used as a basis of judgment, there is reason to believe that a similar survey of the teacher shortage would provide the information needed to deal with this problem which is of such determinative significance in the life of our Nation.

The need for speedy action cannot be overstressed. Ever greater numbers of new students will take their places in our schools each fall far into the future. Unless action is taken soon to change present trends the ratio of qualified teachers to the number of pupils will decline still further. Emergency measures which in the long run will bring about a further deterioration in the quality of teaching will of necessity be introduced. Each year in many communities classes will become larger and larger, the number of half-day sessions will increase, more emergency certificates will necessarily be issued, more short courses will be offered to those who have had little earlier preparation. The combined effect of these expedients must inevitably be a lowering of educational standards for a large percentage of our children—the citizens who tomorrow will determine the destiny of our Nation. The duty of patriotic Americans in this situation is clear: For the security of our Nation, for the welfare of our people, we must intensify our efforts to increase the number and maintain the high quality of the young people entering the teaching profession.

THE THREE R's AND MORE

From teachers to curriculum is but a short step. Some members of the American public are raising questions about certain aspects of the teaching in the schools, questions concerned with the curriculum—with the basic disciplines generally referred to as the "Three R's." The recent criticisms of the curriculum have often taken a dramatic form. Severe attacks have been launched in several cities with echoes reverberating throughout the Nation's press. Such attacks, no matter how baseless, can have a seriously unsettling influence upon the public mind. Americans feel a close kinship with their schools which, they realize, play an important role in the lives of their children. Not even the slightest doubt cast upon the school's effectiveness, therefore, can be safely disregarded.

We are in the fortunate position of being able to prevent a crisis in American education growing out of such misunderstandings. The vast majority of Americans have confidence in their schools. The keen interest exhibited by hundreds of thousands of citizens in the activities of local groups organized in connection with the National

Citizens Commission for the Public Schools and the National Congress of Parents and Teachers proves that our people have faith that whatever inadequacies exist in the schools can be corrected through the cooperation of educators and citizens generally.

The problem of the teaching of the basic subjects needs definition. What is the basis for some of the dissatisfaction expressed about the quality of instruction? To some degree, at least, this stems from the very nature of the educational process. American education has made great strides in recent decades. Increasingly, our schools are becoming child-centered and community-centered; our teaching, less a matter of drill and more of personal experience. Emphasis is upon the development of the ability to think, upon the growth of personality, upon the acquisition of skills. There are, quite naturally, differences of opinion among educators on educational theory and practice. There is complete agreement, however, that children of today, living in an atomic age, cannot be taught the same subject matter and with the same methods and materials which served the needs of earlier generations. In an age of progress, education, too, must keep pace or decline in usefulness.

Educational progress, however, is a long and complicated process, in which the citizens, parents, and others must participate step by step. Their interest must be enlisted, and the changes must meet with their approval. This places a heavy burden on the busy layman and an even greater one upon the school, but the lines of communication must be kept open if our citizens are to understand the school program and support it. Lack of understanding of changes in teaching materials and methods is at the basis of most of the present criticisms of the teaching of the subjects called the "Three R's."

To speak of the modern curriculum solely in terms of the "Three R's" is an anachronism. It is an emotional rather than a scientific approach. Its use is designed to appeal to nostalgia, rather than to the practical sense of the American citizen. As a matter of fact, however, most professional students of the elementary schools believe that today we teach the traditional elementary subjects—reading, writing, spelling, arithmetic—as well as, if not better than, these subjects were taught in our grandfather's day. And the schools teach many other things besides. They give instruction and experience in fields of knowledge and areas of living totally untouched by the schools of an earlier day.

The difficulty is that the evidence to support the claim that schools do a better job today than they did some years ago is scattered and not easily accessible. To shed light on the present controversy a body of authoritative information, scientific data, gathered by competent professional workers is, therefore, urgently needed. Opinions of prominent educators, however valuable, will not serve for this purpose.

A national enterprise should be undertaken, enlisting the efforts of schoolmen, scholars, and laymen, to bring together research information on the teaching of the basic disciplines and other subjects such as physical education, social studies, the sciences, music, and what these contribute to the lives of our young people.

The advantages of such a project would be many. One: The facts about the curriculum of the modern school could be made available to the public in suitable form thus providing a basis for an intelligent evaluation of present practices. Two: Information on current curriculum changes and improvements would be more easily channeled to members of the profession in all parts of the country. Three: Further changes and improvements on a Nation-wide basis would thus be encouraged through constructive suggestions and interchange of experience rather than adversely critical attack.

This project should thus be concerned not only with the gathering of reliable information, but also with its distribution among the people. A nationally representative body of educators and laymen, working with diligence and devotion, gathering and disseminating information on the effectiveness of instruction and of the total school program, would remove the doubts of many of those who now question whether our schools are adequately preparing the children of this generation to live full lives as human beings and as effective citizens.

LIFE ADJUSTMENT EDUCATION

In the field of secondary education there are a number of problems which, though less dramatic, nevertheless call for long-range planning if they are to be successfully dealt with.

One of the most significant features of American society is the growth in the high-school population. Since 1890 it has doubled every 10 years until the high point was reached in 1940 with an enrollment of more than 7,000,000. The drop in the last decade may largely be attributed to the decline in the birth rate during the thirties. Soon, however, there will be another increase and by 1960 it is estimated that high-school enrollment will exceed 8,000,000. Thus while in 1890 only 7 percent of the eligible youth were enrolled in high school, in 1950 the percentage had risen to 77 percent and there will be further increases in the years ahead.

All the more reason, therefore, why it is our obligation at this time to give a realistic accounting of the achievements of secondary education in the United States. Though secondary education is serving the needs of many young people of high-school age the complete picture is not so satisfactory as the enrollment statistics would make it appear. Studies reveal that despite great increases in the percentage of youth of high-school age who are in school, we still fall short of the

goal of providing equal educational opportunity for all, for 1 youth in 5 still does not enter high school. And fewer than 63 percent of those who do enter remain to graduate.

The Office of Education began some years ago to help the high schools serve more completely the needs of American youth through the work of the Commission on Life Adjustment Education. This Commission, established by the Office following a national conference held in Chicago in 1947, took steps to develop a program of life adjustment education "designed to equip all American youth to live democratically with satisfaction to themselves and profit to society as home members, workers and citizens."¹ The work of the first Commission on Life Adjustment Education which completed its term in 1951 is going forward under a second Commission appointed in that year.

The crucial problem with which these Commissions have been concerned is how to provide adequately for pupils of all intellectual levels. Before the great influx of recent decades the problem was relatively simple. In 1890, for example, nearly all high-school students intended to go to college and the instruction they received was designed to prepare them for advanced education. Today only one in five goes to college. Vocational training is pursued by another 20 percent of high-school students. The middle group of 60 percent embraces the young people which life adjustment education is attempting especially to serve.

In behalf of this group of American youth we must come to grips with the educational goals of our modern society. If not a college education, then what? How are these young people to be encouraged to remain in school beyond the legal age limit? How are they to be helped best to utilize the time they do spend in school in preparation to face the problems of life?

For these young Americans secondary education must have new objectives designed to meet their particular needs. Young people vary greatly in their abilities and in their capacities to learn. All of them, however, are capable of development as valuable members of society. A narrow academic education, far from helping all youth to mature properly, often causes social maladjustment, thwarts the desire to learn, and creates attitudes of failure and resignation detrimental both to youth and to society as a whole. The large number of young people who leave high school before graduation is an indication that for them we have failed to establish a suitable education.

The life adjustment education program is fashioning a revised curriculum which stresses the basic objectives of good health, command

¹ *Vitalizing Secondary Education.* U. S. Office of Education. 1951.

of fundamental processes, worthy home membership, civic competence, good use of leisure time, and the development of ethical character. There is a growing recognition that in our modern society the development of social attitudes, of occupational efficiency, of an understanding of the relationship between employer and employee, can no longer be left to chance. These objectives are basic in the life adjustment program.

The Commission on Life Adjustment Education is a cooperative project on a Nation-wide scale designed to find suitable types of high-school education for these youth. The success of this project centered in the United States Office of Education is indicated by the fact that 22 States have established some type of formal body to take the initiative in the development of life adjustment education programs. The work is gradually being extended to all States. Before the benefits of these efforts to revise the high-school curriculum in such a way as to serve the needs of all American youth can be fully successful, greater resources are needed in the Office of Education. The cost in comparison to the total national expenditure on secondary education would be insignificant. Yet it can bring about a vitalization of this entire unit of American education with tremendous benefit to the whole Nation.

Thus far, this report has dealt with Nation-wide problems affecting American children generally. The attention of the Congress is now drawn to several problems, equally urgent, prevailing in specific educational areas or in certain regions of the country.

CHILDREN OF MIGRATORY WORKERS NEED EDUCATION

One challenging problem grows out of a basic economic and social situation involving the children of migratory workers. The Congress has already given serious attention to certain matters related to migrant workers. The Subcommittee on Labor and Labor-Management Relations of the Senate Committee on Labor and Public Welfare held a number of hearings during the second session of the Eighty-second Congress on the conditions of life among the several million migratory agricultural workers in the United States. The basic facts concerning these children, insofar as we have facts, are recapitulated here to indicate the seriousness and the scope of the problem. How many children are involved? What geographical course do their migrations follow? What is their educational status?

The number of migrant agricultural workers' children now living in the several States cannot be accurately estimated. Those who have studied the matter most carefully, however, believe that between a quarter and a half million children are involved. Most of them travel with their parents in four identifiable streams: (1) from lower California, moving northwest through the State and ending in Oregon

or Washington or Idaho; (2) from Arizona or New Mexico, moving up through the Mountain States to the Canadian border; (3) from Texas or New Mexico, moving northward along the Mississippi River and the adjacent States to Michigan and Minnesota; and (4) from Florida, moving through the Southeastern and Middle Atlantic States to New England, often as far as the potato fields of Maine. They remain in a given community long enough to plant or harvest a crop of fruits or vegetables. Then after a few days or a few weeks, they move on to another location. Generally, these workers and their children, though welcomed with open arms to perform the casual labor without which the community would fail economically, are rejected socially as soon as their special job is done. Usually, their living conditions are poor, and the social services available to the rest of the community—medical care, education, sanitation, fire and police protection—are meagerly provided or entirely missing. Children of from 8 to 14 years of age, who should be in school, work in the field often with the encouragement of parents and employers. Neither school attendance officers nor representatives of the Department of Labor are able to make local school attendance laws effective among these nomads. In some communities there is little inclination on the part of the authorities to do so. Consequently the educational achievements of these children range from zero to 4, 5, or 6 years of schooling, usually with accomplishment below that of other children who have had the same number of years of schooling. Studies in some regions reveal that children of migrant workers actually show a lower average educational achievement than their parents. Clearly, we are losing ground.

The United States Office of Education, encouraged by the Department of Labor, by State educational officials, faculty members of colleges and universities, private philanthropic organizations, as well as by Members of Congress, has launched a small-scale study of the education of these children of migratory workers. With the limited resources available, only the merest beginning could be made in meeting this sorely aggravated and highly volatile situation. Nevertheless, with the help of educators in many sections of the country, we have succeeded at least in determining the scope of the problem and outlining the activities which should be carried forward to provide a workable program for the education of the children of migratory workers.

A larger Federal interest in the plight of these children and more effective activity in their behalf are imperative. National responsibility is appropriate because these under-age migrants, tomorrow's citizens, reside in several different States during the course of each year. The children whose education is being neglected may move annually from Texas to Oklahoma, Missouri, Iowa, and Michigan, only to repeat the cycle during the next crop season. Ten years hence they may be living

as adults in St. Louis, Chicago, Detroit, or New York. Their productive capacity will be limited by their lack of early education; their earnings will probably be low. They are far more likely to become a community responsibility than other more adequately trained citizens. Since no one State or community can rightfully be charged with their education, Federal initiative is necessary to establish a joint responsibility.

Ours is a Nation which subscribes to the principle that each individual is entitled to the full educational opportunities generally available. To deprive these migrant children of such opportunities because of the economic and occupational circumstances of their parents is inconsistent with this principle. From the point of view of national interest, we need manpower—well-trained manpower, and there can be no justification for this waste of our human resources. The Office of Education, as a Federal agency, should be charged with the responsibility of organizing a comprehensive and thorough study of the present educational opportunities, or the lack of them, for children of migrant workers. It should do so in cooperation with the educational authorities of the several States. This study ought to lead to the development of a plan by which the present situation can be remedied.

Does this mean that the Government is to take sole responsibility for the education of these migrant children? The answer obviously is in the negative. The principle of local control applies here as to all other areas of education. But the United States Office of Education is in the unique position of being able to muster the resources available in State offices of education, local school systems, colleges and universities, departments of Government, and private agencies for a vigorous attack upon this problem. The limited effort which has been possible with the resources available has brought a quick, sympathetic, and earnest response from many citizens in all sections of the country. They urge the energetic continuance of present efforts on an enlarged scale.

EXCEPTIONAL CHILDREN DESERVE EQUAL OPPORTUNITY

The migratory child is a problem created by the twentieth century mobility of our people plus economic and social maladjustments. He and his fellow migrants belong to the Nation's educationally underprivileged, but they constitute only a minority within that group. They are outnumbered by at least ten to one by 5,000,000 other children who for educational purposes are designated as "exceptional." Though the problem of "exceptional" children is as old as history, special educational efforts to meet it are of but recent origin. Today these children still constitute a challenge to our democratic community.

Who are the "exceptional" children? The term covers a wide range of physical handicaps, mental defects, social maladjustment, emotional disturbance, and, on the other side of the scale, exceptional talents and extraordinary mental gifts. In the United States it is estimated that more than 2,000,000 boys and girls have physical handicaps of varying severity; 700,000 are slow learning. The rest of the 5,000,000 can be classified within the many categories of the mentally defective, the maladjusted, and the specially gifted.

The partially handicapped present the more difficult problem. Traditionally, Americans with their keen sense of responsibility toward those whom nature has rendered helpless were primarily concerned with the problem of the totally disabled. For example, some blind children were cared for in residential institutions as far back as a century ago. Not until 1911, however, were the first day-classes for partially seeing children opened. Since then, progress has been made in providing State and local programs for the education of all types of exceptional children. But considered in terms of the full needs, it is not much more than a beginning.

According to the most recent reports only about 15 percent of the exceptional children who need special help by the schools are currently receiving it. The same factors which have contributed to the growth of other serious problems in American education have doubtless been responsible also for our lethargy in developing appropriate education for the exceptional child. We have suffered from a scattering of effort, from the absence of a national viewpoint, the lack of a central organization which could identify the problem as being Nation-wide in scope and which could stimulate a pooling of experience on a Nation-wide basis. Now, however, Americans have awakened to their responsibility and they are demanding action in behalf of these children. Educational authorities throughout the country are convinced that within a few years public opinion will demand that practically all such children be admitted to the public schools.

But will the schools be ready for them? Will they have properly trained teachers? Proper housing? Will they be able to provide the kind of education which will serve the special needs of these children? At present some of these questions must be answered in the negative. A number of factors retard the expansion of programs for exceptional children. Among them are the shortage of qualified teachers, the high cost of special education, inadequate school housing and facilities.

Of all the factors holding back the service none is so crucial as the lack of qualified personnel. The difficulty in recruiting teachers, however, is not the whole problem. A more basic matter is the necessity to determine what specific qualifications should be possessed by those concerned with the education of exceptional children. If these

qualifications could be more adequately identified it would then be much easier to seek out the kind of people who have suitable characteristics and to plan curricula for their professional preparation. Many groups and individuals have recognized the need for this type of information on a Nation-wide scale. Many have named the Office of Education as the logical agency to initiate and carry out such a study.

The main deterrent to the launching of this important national project was the lack of funds available from governmental sources. This situation was fortunately remedied in the late fall of 1951, when a grant of \$25,500 was made by a private agency enabling the Office of Education to initiate such a study, which is now known as Qualifications and Preparation of Teachers of Exceptional Children. This project, directed by an Office specialist, has the advice and assistance of two committees, one a National Committee of Leaders in Special Education, and the other an Office Policy Committee.

This enterprise is another excellent example of the type of cooperative action which can be so effective in dealing with a national education problem. It involves the Office of Education, over 20 organizations devoted to the problems of exceptional children, national educational agencies, and the education departments of the several States. The principal purpose of the project is to study the qualifications and preparation of teachers of exceptional children. When completed, the study will make available a fund of information which will: (1) assist State departments of education and local school systems in developing and revising standards for teachers of exceptional children; (2) assist colleges and universities in developing and revising curricula for teachers of exceptional children; (3) form a basis for improving educational programs for exceptional children; (4) contribute to a better understanding of the needs of exceptional children by the general public; (5) assist prospective teachers in deciding whether or not they wish to become teachers of exceptional children, and in planning their professional preparation; (6) assist in the clarification of controversial issues concerning the qualifications needed by special education teachers, and thus help to form a basis for better cooperation among professional personnel; (7) serve to identify problems for further study by both public and private agencies as well as by individuals. The findings in this study will reflect the opinions, the experiences, and the achievements of hundreds of specialists throughout the country, and will serve as the basis for the development of educational programs for the preparation of teachers in all branches of special education. This first step in the study will be followed by an intensive informational program beamed to the educational profession and the public as well.

This study represents a great step forward in American education. Though progress will necessarily be slower than the urgency of the situation demands, the establishment of certain basic principles will save years of groping, of trial and error, in the effort to remove the greatest obstacle to the education of exceptional children, the lack of qualified teachers.

Exceptional children, millions in number, constitute a large reservoir of potentially useful manpower. Their potential usefulness, however, can be realized only if proper educational services are provided in the home and the community while these citizens are still children. Their welfare demands that the community provide teachers who are equipped by specialized knowledge, skills, and understandings to help these boys and girls who, otherwise, will not develop their possibilities to the fullest. To carry on with the present project and to initiate additional studies will require more resources than are at present available. And though full advantage should be taken of all available grants from private agencies, the Office should have its own resources to initiate necessary additional studies, and to follow up on the findings in the present study.

EDUCATIONAL TELEVISION

The seventh and final item on our agenda of educational matters of national concern is the task of realizing the full potentiality of television as a medium of instruction and communication. Television probably holds greater promise for education than any other single development since the invention of the printing press.

The profession of education generally approaches new developments with caution. The widespread enthusiasm for television is therefore significant especially since it is based on long experience with related media and on scientific research on the learning capacities of students. Television has added another important dimension to time-tested and proven audio-visual techniques. The old-time lantern slides, the film strip, the silent and then the sound motion picture, the AM radio, and lastly the FM radio have been the proving ground for educational methods which with further experimentation can be brought to a high state of effectiveness in television broadcasting.

The scientific research which produced television was virtually completed by the beginning of World War II, but its practical development had to wait. The very fact of delay in an already technologically perfected medium, together with its tremendous commercial possibilities, has greatly speeded up the development of television broadcasting since the close of the war. Since then television has thrust its coaxial cables and relay towers over much of the country. The pace at which television developed commercially complicated the problem of its utilization in education. Experience in the experimental

stages had convinced educators of its instructional value. It became immediately apparent, however, that educational use of the new medium was not compatible with successful commercial operation. Time was simply too valuable in an operation which measured an hour in terms of thousands of dollars. Education became convinced that, as in the case of FM radio, a portion of the spectrum must be reserved from the public domain for the use of educational television broadcasting. The force of this view, together with engineering and technical problems resulting from rapid commercial development, caused the Federal Communications Commission to issue a "freeze order" under date of September 30, 1948, withholding the further granting of television broadcasting licenses pending hearings to consider educational and other needs.

In the autumn of 1950 the United States Office of Education joined with the National Association of Educational Broadcasters and the Association for Education by Radio in calling a national meeting for the purpose of planning representation at the hearings scheduled to be held by the Federal Communications Commission in November of that year. An outcome of this meeting was the establishment of the Joint Committee on Educational Television. Under the auspices of the Office and of the joint committee, 87 representatives of principal educational organizations in the United States appeared before the Federal Communications Commission. In addition, a number of Members of both the Senate and the House of Representatives appeared in support of the request for setting aside channels for educational use. In his testimony before the Commission, the Commissioner of Education recommended that an adequate number of both very-high-frequency and ultra-high-frequency channels be set aside for educational television broadcasting and that these channels be reserved for a sufficient length of time to enable educational institutions to develop plans for their use.

The case for education in television was effectively presented. The "Sixth Report and Order" of the FCC, dated April 14, 1952, assigned 242 television channels for educational purposes, about 12 percent of the total 2,000 channels available. These reservations are subject to review after June 2, 1953.

Evidence is at hand that educational institutions are moving rapidly to take advantage of these reserved channels. Within 60 days after the issuance of the order 14 applications were filed with the FCC and 8 channels actually assigned. Reports received by the Office of Education indicate that more than four hundred school systems and educational institutions are in various stages of planning for the utilization of television.

Even the current gratifying response to the ruling of the FCC will fall short of full realization of expectations and requirements unless additional support can be given to the schools, institutions, and State and local educational organizations. Relatively large sums of money are involved in establishing and operating television broadcasting stations. School boards, boards of trustees, State legislatures, and private endowing sources require time to consider such enterprises, especially where public financing, hedged about as it is legally, is involved. Moreover, a great deal of experience and guidance must be made available to educational broadcasters both before and after such a station is established.

A beginning has been made toward the provision of Nation-wide research and advisory services in the area of educational television broadcasting. The Joint Committee on Educational Television, operating under a grant from the Fund for Adult Education of the Ford Foundation, is advising educational institutions on legal, engineering, and programing problems. The United States Navy has developed effective training programs through the use of television and these programs are open to observation and research. The United States Office of Education, though severely limited in staff and funds for services, has outlined a program of research and advisory assistance. The Office has also published a monograph, "Television in Our Schools" (Bulletin 1952, No. 16, Federal Security Agency, Office of Education), which contains much information about the development and use of educational television. The services currently available, both public and private, are, however, wholly inadequate. State educational agencies, local school systems, and colleges and universities require much more help in developing their television facilities if this potentially great new medium of instruction is to make its maximum contribution to the formal educational programs of the schools, colleges, and universities, and to the education of adults through discussions, lectures, demonstrations, and the vicarious experiences of travel and historical review.

I should like to outline here some of the services which will be needed by educational agencies in television broadcasting. These are only the pressing current needs which unquestionably will grow and change from time to time. Though these services are described with special reference to the Office of Education, they are sufficiently comprehensive to include the activities of other agencies as well.

(1) Since not enough wave lengths are available to enable each school system to have its own broadcasting station, a pattern for the cooperative establishment of educational television stations must be developed. In most communities all institutions with responsibilities for education, both public and private, will need to form a partner-

ship. In some cases State-wide networks may be practicable. In every case educational statesmanship and good will among participants will be required to insure that all groups have their rightful access to broadcasting facilities. The decentralization of educational responsibilities results in large and varied local practices. But these desirable variations create the need for advice as to proper organizational patterns to serve given situations.

(2) Administrative principles suitable for cooperative local operation must be devised. These principles must be capable of application to widely varied situations, and they must solve problems of budgeting, time allocation, and administrative organization and operation.

(3) A programing service is urgently needed. One of the most difficult problems in educational television is the maintenance of programs of continuously high standard. Among other things, such a service should include a circulating library of complete programs and it should develop related teaching guides and supplementary materials. Research and experimentation must produce new types of programs based on educational rather than commercial consideration, which will create new audience interests. Much such research can be carried on in cooperation with colleges and universities where it is the practice to conduct special institutes and seminars.

(4) Since much yet remains to be learned about the effectiveness of specific types of educational television programs, evaluative research needs to be fostered through the closest cooperation of educational institutions as well as government agencies.

(5) Colleges and universities must be encouraged and helped to develop education programs for the professional training of persons who are to work in the television field, both educational and commercial.

(6) Engineering and technical advisory services are needed. These services, supplemented by the results of research, should lower both capital outlay and operating costs through the more efficient use of equipment and facilities.

It is imperative that the opportunities offered by the "Sixth Report and Order" of the Federal Communications Commission not be allowed to lapse. Even though the launching of such a vast enterprise on a Nation-wide basis is a gigantic task, speedy action is required on the part of American education. A backward look over the last quarter of a century shows that though the educational significance of radio has come to be enormous, the delay in its development was inexcusable. Neither the profession nor the lay public generally can afford a repetition of this costly time lag in the full use of television for educational purposes.

American education is now teetering on a tight-rope in relation to television. It can topple over into failure or it can achieve great suc-

cess. Television represents a large financial investment in terms of original capital investment and to a degree in the cost of current operations. In terms of the cost per student or general observer, however, the cost will be far below that of many other types of education. And the cost must be equated to the educational benefits to our people as a whole and to the strengthening of our democratic institutions. It is in my judgment not money alone which will discourage educational institutions from undertaking the establishment of television stations. More likely it will be the sense of uncertainty about how and where to get help in exploring the costs, the procedures, the resources, and the cooperative relationships involved in the establishment of an educational television station while channels are still available.

The United States Office of Education has a rare opportunity of establishing a service not for remedial purposes—to deal with a problem after it has been allowed to grow—but of creating a climate in which a new educational medium can flourish.

The present resources of the United States Office of Education are not adequate to do the job expected of it and for which it can rightfully be held accountable. We need to add personnel of high caliber in this highly dynamic field, and we need further to be enabled to establish cooperative research programs with colleges and universities, and with State and local school systems as the basis for the further development of television for educational purposes. Together with schools and colleges and other educational organizations and agencies the Office of Education must share its load if all that needs to be done in behalf of educational television broadcasting is to be accomplished.

The Role of the Office of Education in Meeting These Problems

The problems described in the preceding sections of this report are some of the most urgent and critical problems presently facing the American educational system. As such they are of great and increasing concern not only to the men and women who staff our schools, but to millions of American citizens everywhere who are interested in a brighter future for their children.

It is not, however, the urgent and critical character of these problems as such which warrants their discussion in this report. The annals of State and local school systems are replete with instances in which comparable crises within a particular State or local jurisdiction have been surmounted and overcome by an aroused citizenry.

The distinguishing characteristic of the problems discussed here—and the reason for their inclusion in this report—is that they are

national problems. They are national problems in that they extend beyond the borders of any one State, or any group of States. They are national problems in that they are beyond the resources of any one State, or group of States. They are national problems in that they require national solutions.

Now the recognition of these problems as national problems requiring national solutions by no means implies that the Federal Government should assume the sole responsibility—or even the primary responsibility—in developing ways of meeting them. It is the peculiar genius of our American form of government that every public question is traditionally resolved as close to its point of origin as possible. In this respect the American educational system is a shining example in which the States have traditionally acted only with respect to problems which are beyond the resources of individual local school districts, and the Federal Government has likewise acted only on those problems which are beyond the resources of local and State jurisdictions combined. Other countries have different patterns, but in education in the United States this is the American way.

But the American way does not require the American people to stand by helpless merely because a problem in American education is national in scope and calls for a national solution. Here again the American genius for practicality in public affairs has evolved a pattern in solving national problems which calls upon, first, the local school districts, then the State or States concerned, to enlist and combine their efforts in reaching a solution. It is only after the problem has been determined to be beyond local and State boundaries and resources that assistance from the Nation as a whole has been sought. And it is the glory of the American educational system—and the pride of most of the American States—that such calls for help have been sounded only in dire straits; and further, that when sounded the calls have been not so much for Federal funds as for Federal leadership, the kind of leadership which can give unity and a sense of direction to a joint local-State-Federal assault upon the educational problem at hand. This, again, is the American way of doing things.

In seeking this kind of leadership, the local and State jurisdictions have, as indicated previously, been turning with increasing frequency during recent years to the United States Office of Education. The reason is not hard to find. The Office of Education is the central point of contact between the Federal Government and all of the diverse and far-flung branches of the American educational system. It is in constant touch with each State department of education and, through them, with the vast metropolitan school systems, the great consolidated rural schools, and each lonely one-room schoolhouse, no matter how isolated it may be. As the principal focal point for the

recommendations of such national organizations as the National Education Association, the American Council on Education, the National Congress of Parents and Teachers, and the National Citizens' Commission for the Public Schools, the Office is increasingly being recognized as the appropriate channel for the presentation of the points of view of these organizations to the Executive Branch and to the Congress. In the international field, the United States Commissioner of Education is being called upon with increasing frequency to serve as the spokesman for American education abroad.

In accepting this call to service the Office of Education recognizes a profound obligation—an obligation not only to the American educational system as a whole, in which the Office staff deeply believes—but an obligation to all of the American people. Actually it is a double obligation which places upon the Office a double responsibility, neither aspect of which can be ignored except at the Nation's peril.

Simply stated, it is this:

In developing solutions to national educational problems of the sort described earlier in this report, the Office of Education must:

(a) evolve plans for the application of Federal leadership and resources where and as necessary to meet these national problems.

At the same time the Office must:

(b) safeguard assiduously the values and benefits traditionally associated with State and local control of education.

Meeting these two requirements of successful local-State-Federal relationships in solving national educational problems requires educational statesmanship of the highest order. It is too much to expect that the Office will always be 100 percent successful in this task. But the problems are there and growing. The national interest cries out for solutions. Strong leadership from the Office of Education is essential.

The nature of the solution will depend in any particular case upon the severity and urgency of the problem itself and the degree of effectiveness achieved by other agencies in meeting it. Only when the efforts of all other groups—local, State, and national, public and private—are found to be inadequate to meet the problem, should the Office of Education undertake direct expenditure of Federal funds for that purpose, and then only on the basis of specific statutory authorization. By conducting its operations in this manner, the Office of Education assures the American educational system, and the American people as a whole, that the traditional values and benefits of State and local control of education will be permanently safeguarded, while at the same time giving leadership to the development of local-State-national solutions to major national educational problems where the national interest requires.

The Future of the Office

In this connection it is important to point out that the preponderant majority of the educational activities of the Federal Government are conducted separately and apart from the Office of Education. The most recent official survey² reveals that the Federal Government is spending some \$3,617,000,000 annually in training and educational activities in the various executive departments. Of this total only about one percent is spent through the Office of Education. Through the years, the Office of Education has had considerable experience in maintaining the traditional relationships between the Federal Government and State and local educational authorities, preserving and strengthening the American tradition of non-interference by the Federal Government in local educational activities. As new programs touching education are established by the Congress, this hard-won experience could be incorporated in such programs in support of the principle of local control of education.

The present staff and resources of the Office of Education are patently inadequate to provide the type of national educational services made necessary by our development as a Nation. The critical need for these services requires that the Office of Education be expanded in staff and resources with the addition of expert personnel in the various branches of education. Qualified experts are needed who will continuously investigate emerging problems in elementary education, secondary education, vocational education, higher education, school administration, education of exceptional children, teaching of special subjects, educational television, testing, guidance, international education, adult education, and many other areas. As these professional workers become available the Office will be able to discharge its full responsibilities to American education. If this is done, the Congress, the educational profession, and citizens generally will be able to turn to the Office for assistance and be assured of efficient service.

Local Control of Education Must Be Preserved

In proposing that the Office of Education should be expanded in the scope and the character of its activities there is no suggestion that local educational autonomy should be invaded. The purpose of the proposal is rather to guarantee that there will be an effective staff and adequate resources in the Office of Education to deal with the national educational problems which this report has described. The proposal

² "Federal Educational Activities and Educational Issues Before Congress," a report prepared in the Legislative Reference Service of the Library of Congress by Charles A. Quattlebaum, House Document No. 423, 82d Congress, 2d Session, July 1951, v. 2, part 3, p. 181.

also rests on the assumption that through the years ahead there will be other problems of national scope and national importance which will require and warrant the close attention of a competent national agency.

The future of the United States will be determined in large measure by the education our children receive today. Deficiencies in this education will inevitably be reflected in the lives of our citizens of tomorrow in reduced personal and social effectiveness. Throughout the history of our great Nation the people have turned again and again to the schools to help them in dealing with their own individual problems and in sustaining and strengthening our democratic society. Our people will continue to turn to these institutions. It is in the national interest to maintain in the Federal Government a unit devoted to the study and analysis of educational problems and issues, and capable of rendering efficient service to the school systems and institutions of higher education as they attempt to serve our youth and our people generally. In this report I have tried to show how this could be done within the traditional American framework of State and local control of education.

Publications Issued by the Office of Education, Fiscal Year 1952

Bulletins, Pamphlets, and Other Publications

Know Your School Law. Bulletin 1952, No. 1.

Statistics of Land-Grant Colleges and Universities, Year Ended June 30, 1951. Bulletin 1952, No. 2.

Accredited Higher Institutions 1952. Bulletin 1952, No. 3.

State Provisions for School Lunch Programs—Laws and Personnel. Bulletin 1952, No. 4.

Core Curriculum Development: Problems and Practices. Bulletin 1952, No. 5.

Higher Education in France, Bulletin 1952, No. 6.

How Children Learn To Read. Bulletin 1952, No. 7.

Financing Adult Education in Selected Schools and Colleges. Bulletin 1952, No. 8.

The Teaching of General Biology in the Public High Schools of the United States. Bulletin 1952, No. 9.

Education in Turkey. Bulletin 1952, No. 10.

The Forward Look: The Severely Retarded Child Goes to School. Bulletin 1952, No. 11.

Federal Funds for Education 1950-51 and 1951-52. Bulletin 1952, No. 12.

Schools at Work in 48 States. Bulletin 1952, No. 13.

How Children and Teacher Work Together. Bulletin 1952, No. 14.

Television in Our Schools. Bulletin 1952, No. 16.

Education in Sweden. Bulletin 1952, No. 17.

Radio and Television Bibliography. Bulletin 1952, No. 18.

Recordings for Teaching Literature and Language in the High School. Bulletin 1952, No. 19.

Health Services in City Schools. Bulletin 1952, No. 20.

Land-Grant Colleges and Universities—A Federal-State Partnership. Bulletin 1952, No. 21.

Some Problems in the Education of Handicapped Children. Pamphlet No. 112.

Summaries of Studies in Agricultural Education, Supplement No. 5. Vocational Division Bulletin No. 248.

With Focus on Family Living. Vocational Division Bulletin No. 249.

The Financing of State Departments of Education, Misc. No. 15.

The Personnel of State Departments of Education. Misc. No. 16.

Science Facilities for Secondary Schools. Misc. No. 17.

Financial Accounting for Public Schools, Rev. 1948. Circular No. 204.

Education in Rural and City School Systems. Circular No. 329.

Earned Degrees Conferred by Higher Educational Institutions, 1950–51. Circular No. 333.

Life Adjustment Education in American Culture. Circular No. 335.

Expenditure Per Pupil in City School Systems 1950–51. Circular No. 337.

State Provisions for Financing Public School Capital Outlay Programs. Bulletin 1951, No. 6.

The UN Declaration of Human Rights in Secondary Schools. Bulletin 1951, No. 12.

Biennial Survey of Education in the United States, 1948–50

Statistics of State School Systems, 1949–50. Chapter 2.

Statistics of Higher Education: Faculty, Students, and Degrees, 1949–50. Chapter 4, section I.

Statistics of Higher Education: Receipts, Expenditures, and Property, 1949–50. Chapter 4, section II.

Education Directory, 1951–52

Federal Government and States. Part 1.

Counties and Cities. Part 2.

Higher Education. Part 3.

Education Associations. Part 4.

Miscellaneous

Administration of Public Laws 874 and 815.

Annual Report of the Office of Education—Fiscal Year 1951.

Digest of Annual Reports of State Boards for Vocational Education—Fiscal Year Ended June 30, 1951.

Fellowships for Study in Latin America. (folder)

First Progress Report—School Facilities Survey.

Supervised Practice in Counselor Preparation. (Misc. 3314–6)

The 6 R's.

They Can't Wait!

Training To Meet the Shortage of Stenographers and Typists.

Periodicals

SCHOOL LIFE (9 issues—October 1951–June 1952, inclusive).

HIGHER EDUCATION (18 issues—September 1, 1951–May 15, 1952, inclusive).

National Scientific Register

Research and Development Personnel in Industrial Laboratories 1950. Scientific Manpower Series No. 1.

The Composition of the Sanitary Engineering Profession. Scientific Manpower Series No. 2.

Manpower Resources in Physics 1951. Scientific Manpower Series No. 3.

Indexes

SCHOOL LIFE, Vol. 33, October 1950–June 1951.

SCHOOL LIFE, Vol. 34, October 1951–June 1952.

Biennial Survey of Education in the United States, 1946–48.



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Office of Education

I. Introduction

THE YEAR 1953 was in many respects a landmark year for the Office of Education and for American education generally. With the creation on April 11, 1953, of the U. S. Department of Health, Education, and Welfare, the word "education" has come to appear for the first time in American history as a part of the title of a cabinet-level department of the Federal Government. A new cabinet Department and a new Secretary have entered the American scene: the Department—and the first Secretary—of Health, Education, and Welfare.

The true long-range significance of this development—significance for the American people and for the strengthening and improvement of their schools and colleges—is something which must unfold with the years. It is much too early to attempt any definitive evaluation. At the minimum, however, a voice for education at the cabinet level has been achieved, and the problems—and opportunities—of American education are assured of sympathetic consideration in the highest councils of the Executive Branch.

The year 1953 was significant also as a period of re-examination and re-evaluation. It was a time for stocktaking, and the charting of new directions—in education as in many other areas of human activity. What are the strengths and weaknesses of America's schools and colleges? How can they be strengthened and improved to meet the ever-increasing needs of mid-twentieth century America? Are the educational facilities and practices of earlier years adequate to the demands of the new technology of jet propulsion and nuclear fission? Are we training enough scientific, professional, and technical manpower—and womanpower—to meet the challenge of a

divided world? How can the resources of the Federal Government best be applied toward the development of solutions to major national educational problems, while at the same time the values and benefits traditionally associated with State and local control of education are safeguarded? These are the sorts of questions with which the Office of Education and the Department of Health, Education, and Welfare were concerned during the fiscal year 1953—questions which must be of concern to all Americans alike in 1954 and beyond.

EDUCATION AND THE BUILDING OF AMERICA

If it be true, as has been said, that America is built upon faith, then one important element of that faith is the faith of the American people in education. Among the early English colonists the first community undertaking in each settlement—with the possible exception of the church—was the colonial school. This was no accident. The colonists believed firmly, as succeeding generations of Americans have believed after them, that the political freedom which they sought could be made secure only through widespread popular education. Said Thomas Jefferson, "If a nation expects to be ignorant and free . . . it expects what never was and never will be."

This basic idea—that only the educated man can be truly free, and that self-government is possible only with an educated citizenry—permeates all early American history and underlay all of the deliberations of the Constitutional Convention. It is not surprising, then, that one of the first acts of the young Republic was the reservation and dedication of the sixteenth section of every township of land in the newly opened Northwest Territory to educational purposes. As a part of the Northwest Ordinance of 1787 the Congress made the clear declaration of policy that—

. . . religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged.

Implicit in the Northwest Ordinance and subsequent similar legislation is the recognition of a valid national interest in the promotion and encouragement of education, a national interest which may at times transcend the more limited interests of the individual States. At the same time it is equally clear that the framers of the Constitution intended to leave strictly to the States and the local communities the control of their own educational institutions, since there is no reference to "education" in the delegation of powers under the Constitution, and the Tenth Amendment provides that the "powers not delegated to the United States . . . are reserved to the States respectively, or to the people."

On these two foundation stones—State and local control, with Federal assistance and support where the national interest requires—has

been built an educational system—or systems—which is unique in the truest sense of the word. Avoiding on the one hand the extreme centralization found in many ministries of education abroad, where education is literally “handed down from above”—and on the other, the evils that would be inherent in a “do-nothing” Federal policy concerning national educational problems—there has evolved a cooperative local-State-Federal partnership in education, the key to which is found not in competition among jurisdictions, but in collaboration among equals in the larger interest of the Nation as a whole.

For the past 86 years, the principal arm of the Federal Government concerned with the well-being of the American educational system as a whole has been the United States Office of Education, now an integral part of the new Department of Health, Education, and Welfare. As the central educational agency of the Federal Government, the Office was established originally in 1867 for the purpose of

. . . collecting such statistics and facts as shall show the condition and progress of education in the several States and Territories, and of diffusing such information respecting the organization and management of schools and school systems, and methods of teaching, as shall aid the people of the United States in the establishment and maintenance of efficient school systems, and otherwise promote the cause of education throughout the country.¹

From time to time during the intervening years, the Congress has responded to recognized national needs by authorizing further programs of Federal assistance and support in certain specialized areas of education where the national interest has required. Thus, when it became clear in the latter 1800's that the national interest required a kind of college or university less bound by the classical academic curriculum, the Congress passed the two Morrill Acts (1862 and 1890) through which each State was led to establish at least one college to provide instruction in agriculture and the mechanic arts.

Similarly, during the early 1900's it became clear that the typical high-school program was too exclusively academic and college-preparatory in character, and that modification of the program in the direction of better vocational education would be in the best interest of the Nation. In response to this recognized need, Congress passed the Smith-Hughes (1917) and related acts, providing Federal funds on a matching basis to the States in support of improved vocational education.

More recently the Congress has acted to provide Federal assistance to local communities in meeting another educational need which would otherwise have been beyond the resources of these communities. This is the program of assistance to school districts in areas where Federal activities have resulted in an increase in school enrollments and a de-

¹ 14 Stat. 434.

crease in the local tax base through Federal property acquisition. Assistance in school construction in such areas has been provided under Public Law 815 and assistance in school operation and maintenance under Public Law 874 (81st Congress, Second Session). Further discussion of this program, as well as others in which Congress has authorized Federal assistance in response to recognized national needs, is found in succeeding sections of this report.

LEGISLATION AFFECTING EDUCATION DURING FISCAL '53

Legislative developments affecting education during the period July 1, 1952, to June 30, 1953, may be grouped conveniently into two categories; namely, those associated with the latter portion of the 82d Congress, on the one hand, and those associated with the incoming Eisenhower administration and the first session of the 83d Congress on the other.

The principal piece of legislation affecting education which was passed in the latter days of the 82d Congress was the "Veterans' Readjustment Assistance Act of 1952" (P. L. 550, 82d Congress, Second Session, approved July 16, 1952) which has become better known as the "Korean GI Bill." Under this Act the Commissioner of Education was assigned three new statutory responsibilities: (1) the publication of a list of nationally recognized accrediting agencies or associations for the guidance of State-approving agencies in approving or disapproving training courses under the veterans educational program; (2) advice to the Administrator of Veterans Affairs concerning the system to be used in approving veterans training courses; and (3) service ex officio as a member of the statutory Advisory Committee to the Veterans Administrator on educational and vocational assistance under the Act. The functions being performed in carrying out these responsibilities are described elsewhere in this report.

With the inauguration of President Dwight D. Eisenhower on January 20, 1953, the new administration began at once to turn its attention to some of the major problems confronting American education. In his State of the Union Message on February 2, President Eisenhower touched upon some of these problems in the following language:

Our school system demands some prompt, effective help. During each of the last 2 years, more than 1½ million children have swelled the elementary and secondary school population of the country. Generally, the school population is proportionately higher in States with low per capita income. This whole situation calls for careful congressional study and action. I am sure you share my conviction that the firm conditions of Federal aid must be proved need and proved lack of local income.

One phase of the school problem demands special attention. The school population of many districts has been greatly increased by the swift growth

of defense activities. These activities have added little or nothing to the tax resources of the communities affected. Legislation aiding construction of schools in these districts expires on June 30. This law should be renewed; and, likewise, the partial payments for current operating expenses for these particular school districts should be made, including the deficiency requirement of the current fiscal year.

In addition, President Eisenhower indicated that he expected to send to the Congress shortly a reorganization plan defining new administrative status for all Federal activities in health, education, and social security, as well as recommendations for establishing a commission to study the proper relationships among Federal, State, and local programs.

On March 12, 1953, the President transmitted to the Congress Reorganization Plan No. 1 of 1953, proposing the creation of a Department of Health, Education, and Welfare as one of the executive departments of the Federal Government, to which would be transferred the various components of the then Federal Security Agency, including the Office of Education. The plan reserved to the Office of Education, or to the Commissioner, the professional and substantive responsibilities vested in them by law, and also specifically provided that the Commissioner of Education (as well as the heads of the other major constituent organizations) should have direct access to the Secretary of the new Department.

The President also included in his message transmitting the plan to the Congress, although not as a part of the plan itself, a recommendation for the establishment, by statute, of a special advisory body to the Secretary on problems of education. Said the President:

There should be in the Department an Advisory Committee on Education, made up of persons chosen by the Secretary from outside the Federal Government, which would advise the Secretary with respect to the educational programs of the Department. I recommend the enactment of legislation authorizing the defrayment of the expenses of this Committee. The creation of such a Committee as an advisory body to the Secretary will help insure the maintenance of responsibility for the public educational system in State and local governments while preserving the national interest in education through appropriate Federal action.

Following approval by both Houses of the Congress, Reorganization Plan No. 1 was signed by the President as P. L. 13 on April 1, 1953, and the new Department came into being 10 days later, as provided by the law, on April 11, 1953. Plans for the Advisory Committee on Education proposed by the President are being developed currently.

Legislation to carry out the President's State of the Union Message recommendation for a commission on Federal-State-local govern-

mental relations was introduced by Senator Taft on April 1, 1953, as S. 1514, a bill to establish a commission on governmental functions and fiscal resources. With certain modifications, this bill was enacted as Public Law 109² providing for the establishment of a 25-member Commission on Intergovernmental Relations. This Commission is responsible for studying the proper role of the Federal Government in relation to the States and their political subdivisions in all fields involving intergovernmental relations, including the field of education, and the Commission is required to submit a report and recommendations to the President and the Congress concerning the allocation of governmental functions to their proper jurisdiction and the adjustment of intergovernmental fiscal relations among the various levels of government. The act specifies that the report and recommendations of the Commission shall be submitted not later than March 1, 1954.

A related measure is the act providing for the establishment of the "new Hoover Commission," known officially as the Commission on Organization of the Executive Branch of the Government.³ This 12-member Commission is charged with the responsibility of studying and investigating the organization and methods of all Government instrumentalities, including those operating in the field of education, for the purpose of proposing to the Congress such changes as may be necessary in the interest of economy, efficiency, and improved service in the transaction of the public business. The Commission is to submit a comprehensive report of its activities and the result of its studies to the Congress on or before December 31, 1954.

The principal substantive legislation of the First Session of the 83d Congress specifically relating to the field of education was the extension for 2 years of the program of school assistance in federally affected areas, as recommended by President Eisenhower in his State of the Union Message and elsewhere. Developments pertaining to this program are discussed in section II of this report.⁴ Other items of educational interest from the First Session included Public Law 226,⁵ which granted the consent of the Congress to certain Western States, Alaska, and Hawaii to enter into a compact relating to higher education in the Western States and establishing the Western Interstate Commission for Higher Education; and Public Law 141,⁶ which authorized "book rate" postage for the transmittal through the mails of educational films and related educational materials.

² Approved July 10, 1953.

³ Public Law 108, 83d Congress, approved July 10, 1953.

⁴ See also Third Annual Report.

⁵ Approved August 8, 1953.

⁶ Approved July 20, 1953.

PROGRESS AND PROBLEMS

The American people are today doing more than they have ever done before for the education of their children. Individually, and through such organizations as parent-teacher associations and lay citizens groups, they are working ever more actively for better schools and improved educational programs. PTA's throughout the country now have nearly 8 million members—nearly double their membership in 1946. Furthermore, during the fiscal year 1953, American citizens taxed themselves approximately \$500 million more to provide for their schools than during fiscal 1952. They spent about \$7.8 billion in fiscal 1953 alone to operate public elementary and secondary schools and to put up new buildings.

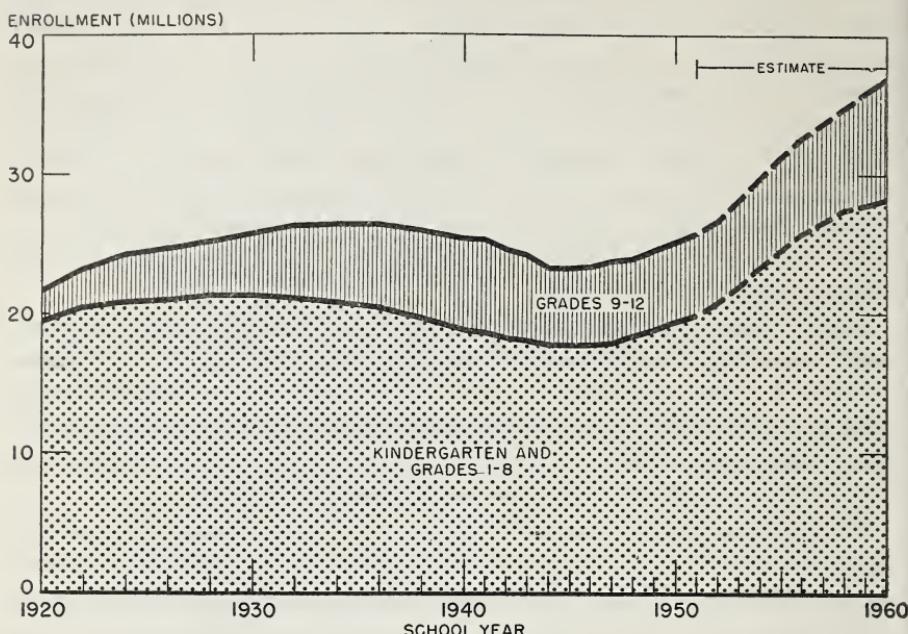
Major credit for these gains rests with the thousands of local communities and the millions of interested citizens who, in accordance with the long-established tradition of State and local control of education, are carrying the principal responsibility for the management of their local schools. The vigor and vitality of this tradition is a source of continuing strength to mid-twentieth century America.

Encouraging as this record of progress may be, however, it is clear that the year 1953 is no time for complacency. Many States and local communities are struggling with educational problems which extend far beyond their boundaries or beyond their available resources, but which still require prompt and workable solutions. And experience indicates that educational problems which are unsolved or imperfectly solved in the States and local communities have a way of becoming national problems as the national interest itself becomes imperiled.

Among the major educational problems being faced in varying degree across the Nation at the present time, the following are perhaps the most widespread and the most urgently in need of solution. The best collaborative efforts of all our citizens—individually and in groups—and all our organizations—public and private, local, State, and national—will be needed if American education is to meet the challenge, and rise to the opportunities, which these problems present.

The need for more and better schools.—School construction is not keeping pace with classroom needs. The United States is short right now more than 340,000 public elementary and secondary school classrooms. Furthermore, increased enrollments (see chart 1), building deterioration and obsolescence will create the need for more than 400,000 classrooms by 1960. Three classrooms out of every five are overcrowded. One out of every five pupils across the country is going to school in a schoolhouse which does not meet minimum fire safety conditions.

Chart 1.—ENROLLMENT IN PUBLIC ELEMENTARY AND SECONDARY DAY SCHOOLS, 1920–60
 (DATA FOR 1952 AND LATER ARE ESTIMATES BASED ON NUMBER OF ACTUAL BIRTHS
 THROUGH MARCH 1953)



The need for more and better teachers.—The number of persons being prepared for and entering the teaching profession is inadequate to meet teacher needs. This shortage is particularly acute in the elementary schools. For the fall of 1953, a minimum of 118,000 new public elementary teachers was needed—53,000 to take care of increased enrollment (1.6 million), and 63,000 to replace teachers leaving the profession. Since only some 45,700 qualified graduates for elementary teaching came out of the colleges, there was a net teacher shortage for the fall of 1953 of over 72,000.

The uneducated; what to do about illiteracy.—There are 10 million adults in the United States who are functionally illiterate, i. e., who have completed fewer than 5 years of schooling. During World War II over 600,000 men were rejected for military service because of functional illiteracy. Three hundred thousand were rejected for the same cause during the first year of the Korean conflict. With one out of every 12 American adults functionally illiterate, the drain upon the Nation's strength and productive capacity is incalculable.

The financing of education.—Rising operating costs have placed new pressures upon all educational institutions, public and private, elementary, secondary, and higher. Among the Nation's 1,900 higher educational institutions, the private liberal arts colleges have been particularly hard-pressed to stretch their income from endowment

and tuition to meet increased operating expenses. At the same time steadily rising tuition and living costs are making it increasingly difficult for children of low-income families to obtain the benefits of a college education.

Educational television.—The full potentiality of television as a medium of instruction and communication—and thus of education—is perhaps still difficult to comprehend. There has been enough research, experimentation, and operating experience to date, however, to make it clear that an important new dimension has been added to proven educational techniques. The creation of a climate in which this new educational medium can flourish—without being overshadowed or thwarted by the rapid and vigorous growth of its commercial counterpart—presents many issues of public policy of the broadest import.

The "drop-out" problem; curriculum adjustments.—Less dramatic than educational television, though perhaps equally significant in its long-range implications, is the problem of curriculum adjustments at the secondary school level, more specifically curriculum adjustments designed to meet the needs of those children who otherwise tend to drop out of school when past the age of compulsory school attendance. Since 1890, high-school attendance in the United States has risen from only 7 percent of the eligible youth to nearly 80 percent. Under these circumstances the problem of shaping the high-school curriculum and keeping it sufficiently flexible to meet the needs of pupils of widely varying intellectual levels and capacities is a continuing one.

Educational benefits of returning veterans.—Under the Servicemen's Readjustment Act of 1944 (the so-called "GI Bill of Rights") more than five million young men and women in all returned to school or college. Under the Veterans Readjustment Assistance Act of 1952 (known as the "Korean GI Bill") some 50,000 veterans were enrolled in colleges and universities in January 1953, and there are many more to come. The Nation as a whole has a real stake in seeing that these veterans receive the full value of their educational benefits on returning to civilian life.

The role of education in technical assistance abroad.—With increasing frequency, American educators and educational institutions are being called upon to help in the program of technical and economic assistance throughout the world. The implications of these relationships for improved international understanding and for the strengthening of the Free World are very great. Much pioneering remains to be done if the potentialities of international education as a part of an enlightened foreign policy are to be fully realized.

Citizen understanding and support of the schools.—Underlying all other problems, and perhaps the most basic of all, is the problem of broadening and strengthening public understanding and support of

the educational institutions of America. As guardians of the finest traditions of the past, as bulwark against the totalitarian assaults of the present, and as symbols and guarantors of our highest hopes for the future, the Nation's schools and colleges are pre-eminent among the free institutions on which our way of life depends. They deserve the full and undivided support and allegiance of all Americans interested in a brighter future for their children.

II. Assistance to Schools in Federally Affected Areas

In reviewing educational problems and issues in his State of the Union Message on February 2, President Eisenhower singled out one particular program for special attention and specific recommendation to the 83d Congress. This was the program of assistance to schools in federally affected areas, for which the President specifically requested renewal. Congressional hearings on the subject began shortly thereafter.⁷

Although the problem of local school districts being overburdened by adjacent Federal activities dates back at least to World War I, it was not until after World War II that the Congress gave systematic attention to the matter. Following expiration of the program for World War II emergency aid for school construction under the Lanham Act, the 81st Congress conducted extensive hearings on the subject and shortly thereafter passed Public Laws 815 and 874, the first comprehensive legislation providing for Federal assistance to schools in federally affected areas.⁸ It was this legislation which President Eisenhower recommended be extended—Public Law 815 through June 1954 and Public Law 874 through June 1956. These terminal dates were selected in order to provide the new Commission on Inter-governmental Relations an opportunity to consider these programs in relation to other grant-in-aid programs of the Federal Government.

In Public Law 874, Congress had declared it to be the policy of the U. S. Government to provide financial assistance (for the *operation and maintenance* of schools) to local educational agencies upon which the United States has placed financial burdens where (*a*) the revenues available from local sources are reduced because the Federal Government acquired real property in the district; (*b*) the school districts provide education for children living on Federal property or whose parents are working on Federal property; or (*c*) there has been a sudden and substantial increase in school attendance as the result of Federal activities. The law established eligibility requirements for assistance, defined the categories in which federally connected children

⁷ Public Laws 246 and 248, 83d Congress, First Session; both approved August 8, 1953.

⁸ Public Law 815, 81st Congress, Second Session, approved September 23, 1950; and Public Law 874, 81st Congress, Second Session, approved September 30, 1950.

should be grouped, and fixed the formula basis for calculating the amount of the Federal payment.

Public Law 815 in Title II⁹ declared it to be the policy of the United States Government that it would bear the cost of *constructing* needed school facilities in areas in which Federal activities have been or are being carried on, in the manner and to the extent provided under the terms of the Act. Payments were authorized to be made to local educational agencies as specified in the Act where children live on Federal property, their parents are employed on Federal property, or the increased attendance results from activities of the United States carried on either directly or through a contractor.

Responsibility for the administration of both laws was placed by statute in the Commissioner of Education. Each Act also required the Commissioner to submit a report to Congress annually concerning the administration of the program.¹⁰

Experience has shown that the laws as originally enacted were basically sound. Without financial assistance of this character, many of the local school districts would have been unable to provide elementary and secondary education for the children whose families had moved into the federally affected areas. With the changes to be brought about by Public Laws 246 and 248 it is expected that further progress will be made in the direction of simplifying and facilitating the entire school assistance program.

III. Services to State and Local School Systems

One of the major and traditional functions of the Office of Education is to provide information, consultation, and advisory service concerning the operation of State and local school systems throughout the Nation. This function has its origin in the basic Act of 1867, which specifies that one of the purposes for which the Office was established was that of

. . . diffusing such information respecting the organization and management of schools and school systems, and methods of teaching, as shall aid the people of the United States in the establishment and maintenance of efficient school systems . . .

One of the major organizational units in the Office which are responsible for the carrying out of this responsibility is the Division of State and Local School Systems.

In providing these statutory services, both the vastness of the American educational enterprise (25 million elementary school children in 135,000 schools and 7 million secondary school children in 27,000

⁹ Activities under Title I of Public Law 815 are treated in Section III of this report.

¹⁰ For a detailed discussion of the operations of this program under Public Laws 815 and 874 (81st Congress) as amended and extended by Public Laws 246 and 248 (83d Congress, First Session), see pages 171-173.

schools in 1952-53) and the long tradition of State and local control of education have led the Office to rely very heavily upon the departments of education in the various States as an intermediate point of contact. Thus, during recent years much of the work of the Office has been carried on in close collaboration with the State departments, including many joint conferences and parallel activities on educational problems of mutual interest and concern. The work of the National Council of Chief State School Officers has been particularly significant and useful in facilitating the development of these cooperative Federal-State relationships in education.

The services provided by the Office to State and local school systems are widely diverse and varied in character. Yet they are all directed at the common statutory objective of "aiding the people of the United States in the establishment and maintenance of efficient school systems."

SCHOOL ADMINISTRATION

During the year a considerable amount of attention was given to a study of State legislative provisions designed to promote statewide school district reorganization which would result in the establishment of more effective local school districts. This study involves an analysis of the principal legislative features in the respective States which embody statewide plans for school district reorganization. From a study of such laws and their respective results, it is hoped that an evaluation may be made which will indicate the type of legislation likely to produce the best results in other States which seek to improve local school district organization.

In the area of local school administration a study relating to reorganized school districts established in recent years was completed. Information obtained from this study is now available in two new bulletins. One of these bulletins gives an analysis of various size and sociological features of 552 reorganized local administrative units in eight States. The other sets forth some of the major changes made by these districts in improving their educational programs.

A related study was initiated which involves an intensive investigation of the redistricting programs in 16 States to identify and evaluate factors which influence local communities to take favorable action in establishing more effective school districts. A considerable amount of information was collected on factors relating to reorganization legislation, school finance provisions influencing reorganization, the State leadership and services provided, and the local community procedures involved.

A major activity in the area of State school administration during the year was related to improving basic statistical information for American education. Educators and others have long recognized the

need for nationwide comparability of educational information. During 1953, American education moved a long way forward toward its goal of establishing comparability of educational information. One of the results of the year's undertaking was the completion of *Handbook I, The Common Core of State Educational Information*, which contains the basic items of educational information, with definitions, that every State should have available annually.

The National Council of Chief State School Officers has officially accepted the Handbook as the fundamental guide for State educational record and reporting systems and has urged all of the States to incorporate the Handbook information into their State systems. Handbook I is the first of four handbooks planned in the Office of Education series to establish comparability of educational information. Similar handbooks are planned in financial, personnel, and property accounting.

Closely associated with the project for improving basic statistical information throughout the Nation was the study of the annual and biennial reporting practices of State boards of education and chief State school officers, completed in 1953. This study was a joint enterprise conducted with the Study Commission of the National Council of Chief State School Officers which culminated in the publication, *The State Department of Education Report*.

In the area of school finance, the study, *Expenditures for Education at the Midcentury*, was completed and the printed bulletin will be available shortly. In this study, data were included for 63,402 school administrative units which operate schools in all the States and outlying areas. The report discusses variations in levels of expenditures per classroom unit, showing ranges both within and among the States and other areas. Charts, tables, and discussions also pertain to financing basic State programs of education, evaluation of educational equalization, ability and effort to support public schools, and progress in financing education during the past 10 years.

Work on another report supplementary to the expenditure study was also started near the end of the fiscal year. This supplementary report will include data for the 12 States which reported separate data for white and Negro children. The report will present expenditure levels for classrooms of Negro children so they may be compared with State averages and with corresponding levels for white children in these 12 States. Comparisons will be presented showing the situation for the 1949-50 school year in contract with that for 1939-40.

SCHOOL FACILITIES

During fiscal 1953, leadership and consultative services were provided to State and local school systems relative to the Nation's largest annual school building program in history.

The status phase of the School Facilities Survey (Title 1, Public Law 815, 81st Congress) was completed in 43 States, and, at year's end, this phase of the study was still in progress in other States. Progress reports have revealed some alarming shortages and unsatisfactory conditions in the public-school plants of the Nation (see charts 2 and 3).

Chart 2.—PERCENT OF PUBLIC ELEMENTARY AND SECONDARY SCHOOL PUPILS HOUSED IN BUILDINGS RATED BY THE STATES IN 1951 ACCORDING TO DEGREE OF FIRE SAFETY (DATA FROM 42 STATES ENROLLING 19,002,362 PUPILS IN 1949-50)

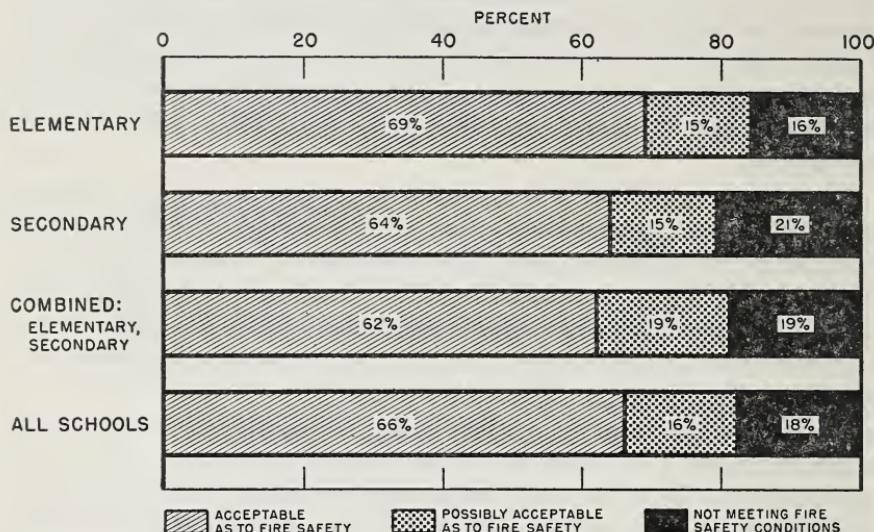
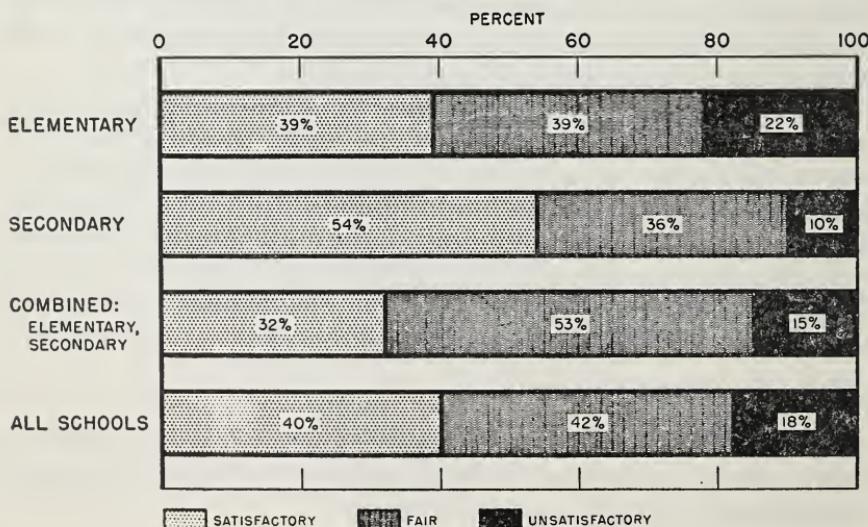


Chart 3.—PERCENT OF PUBLIC ELEMENTARY AND SECONDARY SCHOOL PUPILS HOUSED IN SCHOOL PLANTS RATED BY THE STATES IN 1951 AS SATISFACTORY, FAIR, AND UNSATISFACTORY (DATA FROM 43 STATES ENROLLING 20,156,045 PUPILS IN 1949-50)



The forthcoming *Report on the Status Phase of the School Facilities Survey* will give the first nationwide comprehensive picture of the schoolhousing situation and the funds required to provide adequate schoolhousing. During fiscal 1953, many of the States started the long-range planning phase of the survey which will be substantially completed during fiscal 1954.

Assistance to school officials and architects on layout patterns was continued by a cooperative study of the space and facilities of elementary classrooms, resulting in the first of a series of brochures on the functional layouts of specific areas of the school plant. Continued studies of functional patterns of school furniture and equipment included a study of the body measurements of school-age children, thus providing basic data for the design of school furniture and equipment.

Specific services were provided to State and local school systems relative to school plant management problems including preservation of school property, plant operation and maintenance programs, safety, and community and summer use of school plants. Attention was given to school plant services in the State departments of education, especially in connection with the development of codes and regulations, school building surveys, and functional-planning service to local districts. The Office also developed construction estimates, school building cost analyses, and technical data, and made this information available through school plant planners and architects, professional magazines, and the daily press.

SERVICES TO ELEMENTARY EDUCATION

During the year two members of the Elementary Education staff worked as members of the Mid-Century Committee on Outcomes for Elementary Education. Many others assisted as the work of the Committee progressed. The published report is now in print.

Emphasis is being continued on helping school people improve their ways of helping children learn to read, write, think, and develop creativity. This is being accomplished through publications, consulting with leaders of more than 60 lay and professional organizations, conferences, speeches, and advising teacher groups who seek help in these phases of their school program.

The staff is continuing to give leadership to lay and professional organizations directed to a better articulation of effort, closer collaboration on programs, and an evaluation of gaps in educational services to children. As an example, staff members assisted the Girl Scouts in working out a comprehensive program of Scouting for girls of migrant families. Several organizations were drawn in to articulate their programs along with that of Scouting. This pilot effort was begun in the State of California in June of 1953.

Staff members worked with the Department of Labor on materials to emphasize the importance of children returning to school in the fall. The Elementary Section and the Children's Bureau also worked together during the year on two projects of long-range significance: programs for State Training Schools and ways to improve extended school services for children of working mothers.

A considerable amount of staff time during the year was spent in helping to orient, advise with, and develop visitation programs for foreign educators. Individual and group conferences were held and visits to public schools were arranged.

A number of American educators, going to missions abroad, were also assisted. They were advised on ways of working, appropriate professional books were recommended, and lists of suitable instructional materials for developing educational programs in underdeveloped countries were prepared. Reports of educational projects were studied, activities evaluated, and recommendations for certain improvements were proposed.

Five members of the staff continued to serve a clearinghouse function of sending helpful information and descriptions of good practices to local school people faced with the migrant farm family problem. Cooperative relationships were strengthened with other Federal agencies and lay organizations. Leadership and assistance were given to the personnel of about 23 State departments of education helping them to render better service to local communities in regard to the educational problems of migrants. A major part of a seminar report on the problems of migrants was written and published. Well over three hundred requests for materials were filled.

SERVICES TO SECONDARY EDUCATION

A study, *Statistics of Public Secondary Day Schools, 1951-52*, was completed during this fiscal year. Some of the significant highlights of this study were "The number of high schools with extremely large enrollments is decreasing as is also the number of high schools with extremely small enrollments. . . . The trend toward reorganized high schools has been accelerated since 1946. In 1952 reorganized high schools constituted about three-fifths of the entire number of high schools in the Nation and enrolled about three-fourths of all public high school pupils. . . . In 1952 men constituted 48 percent of the total professional staff . . . the highest proportion reached during the last 30 years."

A pressing and continuing problem in the high schools involves the difficulty in teaching pupils with widely varying interests and abilities in the same school and often in the same class. A questionnaire study has been launched to find out the practices actually used in dealing with fast and slow learners in eight different aspects of

school work. From a sample of 1,200 high schools, 850 questionnaires were completed and returned. These replies are currently being tabulated and analyzed. The purposes of the study are (1) to determine present practices and (2) to identify schools unusually effective in this regard so that they may be studied more carefully.

"Pupil Appraisal Practices in Secondary Schools" was the theme of the fifth national conference sponsored by the Office of Education and the Commission on Life Adjustment Education for Youth. In attendance were approximately 200 participants who were nominated by chief State school officers, State directors of secondary education, and members of the Commission.

Consultative services were provided for many educational programs which are operated by other Government agencies. For example, 2 specialists spent 2 weeks each helping the Army to improve its literacy education program (reading, writing, and arithmetic) for draftees. One specialist spent 3 months, at the request of the State Department, advising the Ministry of Education in Turkey. For the foreign teachers, trainees, and leaders interested in secondary education who were routed through the Office, the entire staff was involved in group orientation conferences, individual counseling, and cooperation with State and local educators in planning study activities.

Staff members also cooperated with numerous professional associations by serving on committees, speaking at meetings, and writing for yearbooks and magazines. The Office and the American Association for the Advancement of Science jointly planned, conducted, and reported (in an Office publication) a conference on identifying and teaching pupils who are talented in science and mathematics.

EXCEPTIONAL CHILDREN AND YOUTH

A major project during the year was the continuation of the study, *Qualifications and Preparation of Teachers of Exceptional Children*. The project will continue during 1954 and from it much information should be obtained which will be useful in reevaluating the college programs for the training of teachers and in establishing realistic qualifications for teachers in the various fields.

Collaborative efforts with the Children's Bureau continued on the production of materials for public-school personnel concerning the control and prevention of juvenile delinquency. A new bulletin in this field is ready for publication and eventual distribution to the State and local schools.

A complete review and summarization of legislation adopted by the various States concerning the education of exceptional children was made and the results published in **SCHOOL LIFE**. This review brought up to date the original publication of 1949 and indicated a rapidly

developing legislative program in which 46 of the 48 States participate.

In cooperation with the Research and Statistics Section, statistics of public-school special education facilities were collected during the year. These data will form the basis for the first such report that has been made available since the statistics for 1947-48 were published. They will appear in bulletin form as a part of the Biennial Survey of Education early in fiscal '54.

VISUAL EDUCATION SERVICE

The Visual Education Service continued during the year its systematic cataloging of information about motion pictures and film-strips of all Government agencies which are available for public educational use in the United States. Descriptive copy on 1,070 such films was prepared for the Library of Congress to use in printing and issuing its catalog cards. A special catalog of 528 Government films cleared for television use has also been prepared. Cooperation with the Library of Congress continued in the formulation of definitive rules for cataloging films leading to the issuance, in March 1953, of a revised edition of such rules. The Chief of the Visual Education Service served as manager, then as observer of a UNESCO conference on international standards for film cataloging held in Washington during May 1953.

The Visual Education Service also continued to serve as the primary point for the release of Government films for educational use and to administer the GSA contract covering the sale of copies of such films. During the year, 166 films were released for sale, while 7 were withdrawn from sale. At the end of the year, 2,750 motion pictures and film-strips of 22 different agencies were being sold under the GSA contract.

The 1951 directory of 2002 film libraries was revised and sent to the Government Printing Office as a 1953 directory of 2,660 film libraries. This State and city directory of 16mm loan and rental sources was prepared, as were previous editions, with the cooperation of the American Library Association, Association of Chief State School Audio-Visual Officers, Educational Film Library Association, National Audio-Visual Association, and the National Education Association.

SERVICES TO LIBRARIES

About 100 years ago, the first public library, as we know the term today, was founded in the United States. A survey just completed by the Office of Education shows, among other things, that 7,477 public libraries are now operating in the United States; and that these institutions own some 149 million volumes, circulate about 413 million volumes annually, and spend \$109 million yearly. The data also show

that 60 percent of the Nation's public libraries have annual budgets of less than \$4,000 per year and that some 30 million people are still without any local public library service.

Standards for school libraries are important instruments for checking upon the effectiveness of the library in the total school program. With this in mind, an analysis was made during the year of the standards formulated by State departments of education and four regional accrediting associations. The findings show: an almost universal adoption by State departments of education of library standards or recommendations for secondary schools; a widespread extension of library standards or recommendations to the elementary school; and greater emphasis on the functions and services of the library than on purely quantitative library requirements as was formerly the case. The results of this study appeared in the *Bulletin of the School Library Association of California* for May 1953 and in *School Libraries*, official publication of the American Association of School Librarians, for July 1953.

The current widespread shortage of trained, competent librarians renders acute the problem of adequate opportunities for library education. To provide college and university executives, school administrators, public librarians, and prospective students with an impartial and timely review of the current pattern of professional education for librarianship, research has been undertaken to ascertain the number of course offerings, curriculum changes, and admission and degree requirements. It was found that more than 500 institutions of higher education now offer courses in librarianship in an effort to meet current library needs.

Rises in operating costs and generally static incomes in the last 5 years have caused university and college executives and librarians to view critically the adequacy and efficiency of library resources, use, expenditures, and personnel required in higher educational institutions. To provide objective data on these points a nationwide statistical survey was undertaken covering the fiscal year 1951-52, and is now nearing completion.

RADIO AND TELEVISION SERVICES

The fiscal year just ended was one of transition, in several respects, for the Radio and Television Services Section.

Up to late spring of this year, educational institutions in each of the 242 local areas where the Federal Communications Commission had tentatively designated a TV-channel for educational station assignment had been concerned primarily with the legal, technical, and fiscal aspects of building stations. However, by the year's end, 3 educational TV stations had been built and 2 of them were in operation. Furthermore, construction permits for 17 others had been

granted and 47 applications were on file with the Federal Communications Commission awaiting processing. Satisfied with this showing, the Federal Communications Commission announced that the 242 channel reservations for education would be continued indefinitely. Relieved of pressure for immediate station construction, educational station planners are now including all aspects of programing and station operation in their planning activities.

In the meantime the Radio-Recordings Program which was started 15 years ago to give teachers an opportunity to explore the educational potentialities of recorded instructional materials, was judged to have performed its pioneering function and was accordingly discontinued. This library of educational program recordings is now in process of being distributed among the various State, regional, and city schools, as well as among the instructional materials distribution centers that have grown up in this field in recent years. A small new Reference Resource Materials Library has been established in the Office in recognition of the desirability of retaining a representative sample of instructionally useful material in the broadcast media field for study by instructional materials specialists and educational program producers.

The principal focus of the work-study program of the Joint Committee of the Office of Education and the Radio-Electronic-Television Manufacturers Association on the use of communications equipment in education has shifted during the year from equipment to teaching. The three earlier studies of the Committee each dealt with a single class of communications equipment and undertook to discover and describe all the instructionally useful things schools were doing with it. However, its fourth study started with actual instructional jobs the schools must perform and undertook to discover how their accomplishment might be facilitated through the imaginative use of various types of communications equipment. Thus, the Committee's latest information booklet, *Teaching with Radio, Audio, Recording, and Television Equipment*, identifies a number of instructional and activity objectives, and explains various combinations of equipment and instructional procedures by which each can be accomplished.

IV. Services to Vocational Education

The responsibility for vocational education as a function of the Office of Education has its origin in the Smith-Hughes Act, which provides Federal funds to assist the States in the promotion of vocational education. This act and subsequent Federal vocational education statutes recognize that the welfare and economy of the Nation are based on the productive capacity of its workers. The program of vocational education is a Federal-State cooperative educational endeavor.

States and local schools have the responsibility for planning and operating the programs. The Office of Education through its Division of Vocational Education has the responsibility for (1) administering the Federal Vocational Education Acts, and (2) assisting States in the promotion and further development of their programs.

The chief purpose of vocational education is to fit youth for useful employment. It develops not only job skills but also the abilities, understandings, attitudes, work habits, and appreciations which are necessary for a productive and satisfying life.

Federal funds appropriated for vocational education programs in the several States and Territories in fiscal 1953 amounted to \$25,811,590.90. Allotments of these funds to States were for the purpose of assisting them in providing vocational education in agriculture, home economics, trades and industry, distributive occupations, and the training of vocational teachers in these occupational fields.

The scope of the program in 1953 may be measured by the fact that more than two-thirds of the high schools of the Nation provided vocational training in one or more fields, i. e., agriculture, distributive occupations, homemaking, and trades and industries. Over 3.1 million youth and adults were enrolled in these vocational classes.

Much of the time of the Division staff was devoted to activities required in the administration of the Federal appropriation of \$25.8 million, which was allotted to the States and matched by State and local expenditures of more than \$120 million. Other activities of the Division during 1953, directed toward the further development and improvement of the program, included work such as that described below.

REAPPRAISAL OF PROGRAMS OF VOCATIONAL EDUCATION

Because each State board for vocational education has final responsibility for the vocational education program in its respective jurisdiction, the work of the Division of Vocational Education in the Office of Education is largely with the professional staffs of the State boards. During 1953 the Division gave special attention to assisting States in developing their leadership with the idea that States should assume more responsibility for maintaining standards and for extending and improving the program. This emphasis was exemplified by the work of the Division with a committee consisting of four chief State school officers and four State directors of vocational education, and known as The Commissioner's Advisory Committee for the Further Development and Improvement of Vocational Education. The purpose of this Committee is to study the entire field of vocational education of less than college grade and to make suggestions and recommendations which would, in the opinion of the Committee, result in the further development and improvement of this phase of education.

The staff of the Division also gave a great deal of attention to analyzing its own activities in relation to objectives and purposes which the staff believes should be achieved in the next 5 or 10 years in the field of vocational education. This involved defining the unique responsibilities of various members of the staff for coordination, for leadership in program development, for administration, and for analysis of the special needs for vocational education in the United States. Statements of philosophy, procedures, and activities were developed for use both within the Division and in work with States. Special emphasis was put on techniques for finding out what problems in each State should be given special attention in subsequent field work of the staff. Division policies, procedures, and objectives in holding conferences of State personnel were reexamined with the objective of achieving greater effectiveness in the development of State leadership through such conferences.

SERVICES IN EVALUATION AND SUPERVISION

Special emphasis was given to assisting States in their evaluation of vocational education programs. Staff members of the Division provided leadership for State personnel in developing and using criteria for use in evaluating training, in evaluating programs for the training of vocational teachers, and in reexamining and reorganizing the administrative operations at State and local levels.

Consultative service was provided also to States in developing procedures for improving their programs of supervision. Specifically, assistance was given to a committee representing several States in developing a guide for evaluating and supervising, and in considering ways to improve State supervisory programs. In another instance, staff members worked with professional personnel from 8 States to study ways of improving supervision, and to consider such problems as (1) setting up research programs to determine effectiveness of supervision in the State, and (2) finding ways of evaluating different procedures and devices used in the supervisory programs. In still another instance, the staff of the Division assisted in developing a manual and guide for the use of State and local supervisors in reviewing and evaluating local programs. Several States are now using adaptations of this manual with a high degree of success.

A bulletin, *The Operation of a Local Program of Trade and Industrial Education with Emphasis on Improving Instruction through Supervision* (Vocational Division Bulletin No. 250), was published and has had extensive use in improving supervision.

These and other efforts of the Office grew out of the States' interest in developing improved supervisory procedures to provide maximum aid to local schools with the ultimate idea of developing criteria against which a local community could measure its own program.

SERVICES TO YOUTH ORGANIZATIONS

With the increased necessity for young people to develop the ability to carry specific responsibilities, the Division assisted State staffs in further strengthening leadership training programs for youth organizations whose members are enrolled in vocational classes in agriculture and homemaking—Future Farmers of America, New Farmers of America, Future Homemakers of America, and New Homemakers of America. These organizations have a combined membership of approximately 815,000.

SERVICES IN TEACHER EDUCATION

Because of the shortage of teachers and other leaders for vocational programs, particularly in the field of home economics, the Division worked with the National Association of State Directors of Vocational Education in developing criteria to guide State boards and colleges and universities which train home economics teachers to reexamine their programs for the selection and training of such teachers to the end that more and better teachers may be available.

SERVICES IN INTERNATIONAL EDUCATION

Although the Division does not have direct responsibility for bringing groups of educators from other countries to study our vocational education program, or for assigning vocational educators to assist other nations in developing vocational education, much time and effort was spent in this work. Activities consisted of recommending standards for selecting persons to be sent on foreign assignments in vocational education, in securing lists of persons who were interested in such assignments, in briefing such persons before their departure, and in interviewing them upon their return. Even more time and effort was devoted to working with foreign visitors; specifically in making arrangements with State and local schools for their visits, planning and conducting programs of orientation for visiting groups, interviewing individuals preliminary to their observation of vocational education in States and local communities, and again interviewing them before their return to their own countries.

SERVICES IN PRACTICAL NURSING

In cooperation with the Public Health Service, the Office of Education gave special assistance during the year in the development of courses for training practical nurses. The growth of this program is indicated by the fact that in fiscal year 1952 there were approximately 160 communities providing such training under public-school supervision, whereas in fiscal year 1953 the number had increased to approximately 185 communities. Part of this increase was due to the

participation and support of nursing, medical, and hospital organizations and part to the need for more help of a semiprofessional nature in hospitals. Schools of all types are now graduating about 3,000 practical nurses a year, most of whom are graduates of the courses conducted under the vocational education program.

SERVICES IN RESEARCH AND NEW AREAS OF WORK

Supplementing the assistance given to States through conferences and visits to the States by staff members, the Office of Education stimulated research on emerging problems during the year by publishing the following printed bulletins relating to vocational education:

With Focus on Family Living: The Story of Four Experiments In Community Organization for Family Life Education. Vocational Division Bulletin No. 249.

Summaries of Studies in Agricultural Education. Vocational Education Bulletin No. 251.

Home, School, and Community Experiences in the Homemaking Program. Vocational Division Bulletin No. 252.

V. Services to Higher Education

During the fiscal year 1953 the Division of Higher Education used its resources:

1. To assist in an orderly expansion of facilities and programs in higher education
2. To provide information on program costs and student expenditures
3. To clarify policies and procedures relating to college accreditation and licensure in the professions
4. To administer Federal grants for resident instruction in the land-grant colleges, and otherwise to serve these institutions, and
5. To further international understanding.

Some of these functions were the responsibility primarily of one of the Division's three Branches: College and University Administration, General and Liberal Education, or Professional Education; others involved two or all three Branches.

EXPANSION OF FACILITIES AND PROGRAMS IN HIGHER EDUCATION

Facilities.—The present enrollment in colleges is approximately the same as the enrollment in secondary schools was in 1920. There are now approximately 8,500,000 persons 18 to 21; by 1970 there will be about 14,250,000 persons in this age group, an increase of 67 percent. Fewer than half the States have any systematic means of determining

what facilities are needed for higher education and where they should be located.

During preceding fiscal years the Division had undertaken a comprehensive study of existing space and of needed additional facilities at the college level. This study was reported in the bulletin, *College Building Needs*. The data in this report have been kept current through the program of rationing controlled materials which the Office of Education conducted as the agent of the National Production Authority. The data have been expanded through the continuous inventory of the physical facilities and staff resources of this country's colleges and universities. The purpose of this inventory is to determine the facilities and resources possessed by each institution of higher learning that might be used to train technical, professional, and other specialized personnel required to meet the Nation's obligations at home and abroad. The inventory has been widely used by Federal and State agencies and by voluntary organizations having a stake in the planning and the development of programs of higher education.

College housing loan program.—An agreement between the Administrator of the Housing and Home Finance Agency and the U. S. Commissioner of Education enables the Division of Higher Education to provide an educational advisory service on the College Housing Loan Program under the provisions of Title IV of the Housing Act of 1950 (P. L. 475). In carrying out this advisory function liaison is maintained with such organizations as the American Council on Education, the Land-Grant College Association, and the National Education Association. Staff members meet with groups of educators in National, regional, and State conferences to consider ways of providing urgently needed housing.

During the past fiscal year 116 applications for college housing loans were reviewed. The total value of loans requested was \$69,362,887. Of this amount \$63,124,745 was recommended for approval. Most of these applications were from institutions in which a backlog of housing need had existed for 10 years or more. In each instance the institution was required to justify the proposed housing project on the grounds that it was defense-related or made necessary by the college's location in a defense area characterized by a critical shortage of housing.

At the end of fiscal year 1953 the sum of \$86.5 million of the total amount of \$300 million authorized by Congress for loan purposes, had been committed. Facilities completed or under construction will accommodate some 600 student and faculty families and 25,661 single students.

Education for the professions.—The professions render highly specialized services to society which can be provided only by persons who have had prolonged training at a high intellectual level. They

include about 6 percent of the working force of this country—upward of 4 million persons. The day-to-day functioning of the Nation depends heavily upon professional people.

The Division of Higher Education has begun a long-term study of professional education in the United States. During the past fiscal year a series of articles on professional education has been appearing in the periodical, *Higher Education*. Among the fields covered were engineering, forestry, journalism, law, librarianship, medicine, nursing, optometry, pharmacy, theology, veterinary medicine, public health, business administration, home economics, and hospital administration. These articles, in revised form, together with additional material, are being prepared for publication in an Office of Education bulletin, *Professional Education in the United States*. There is a great need for a publication which brings together the principal facts about professional education.

Health professions.—In recent years several groups of professional schools have shown collective interest in improving the quality of teaching. Among these have been the schools of dentistry and the colleges of pharmacy. The staff of the Division has assisted both of these groups in the conducting of conferences and seminars designed to improve instruction in these two fields.

Engineering.—The annual study of Engineering Enrollments and Graduates, made jointly with the American Society for Engineering Education, was published during the year as Office of Education Circular No. 364. Data were also gathered to make possible a revision of tables in Bulletin 1949, No. 15, *A Survey of Cooperative Engineering Education*. The up-to-date information is included in Office of Education Circular No. 368. An article on "Engineering As a Career," was also prepared for the January 1953 issue of *SCHOOL LIFE*. This article contains the kind of information about the profession and the qualifications and abilities needed by prospective students of engineering that should be brought to the attention of interested high-school students.

Teacher education.—During the past year the most significant development in the field of teacher education has been the organization of the National Council for Accreditation of Teacher Education. The organization of this Council constitutes the first effort to bring to bear the major forces in teacher education on the problem of accreditation. Only 274 of the 1,217 institutions that prepare teachers are accredited by an agency national in scope. It is hoped that the Council can increase that number and also keep standards high. This new Council is made up of 21 members representing State departments of education, colleges and universities that prepare teachers, classroom teachers and administrators, and boards of education. The Division

of Higher Education has assisted in organizing this Council and is represented on its panel of consultants.

As a part of the movement to raise standards in teacher education, the Division cooperates with the National Education Association in the biennial publication of a description and an analysis of the teacher certification requirements in each of the 48 States and the Territories. During the fiscal year a revision of this publication was issued, entitled *A Manual on Certification Requirements for School Personnel in the United States*.

Specific help was given to three States during the year on their problems relating to teacher education. Consultant help has been provided to the public-supported colleges in Virginia on their curriculum for the education of teachers. Similar assistance has been provided to institutions in Arkansas, where a special experiment under Ford Foundation sponsorship is in progress. Consultant service on the problem of teacher supply and demand for the next 10 years in the State of Maryland has also been provided. This project has resulted in a redistribution of the functions of teacher education among the public and private institutions in that State.

Shortage of teachers.—In the fall of 1952, data were collected from State departments of education showing the number of qualified teachers needed to staff the schools in each State and the number of teachers not fully qualified to whom temporary or emergency certificates had been issued. Comments were also invited from State departments of education as to the outlook for an adequate supply of teachers.

General education.—General education seeks to prepare young people to become good citizens and to deal effectively with contemporary problems. It is concerned with the needs students have in common rather than with their specialized cultural or professional needs. The increasing compartmentalization of American higher education and the increasing number of students seeking a college education help to explain why the development and administration of adequate programs of general education present many difficulties. The importance and difficulty of building adequate programs of this kind also are reasons why the Division of Higher Education has concerned itself with the problems of general education.

During the fiscal year 1953 visits to eight representative institutions of higher learning (Colgate, Colorado, Columbia, Denver, Oklahoma A and M, Princeton, Rochester, Syracuse) afforded first-hand impressions of their programs of general education as well as of programs for the preparation of teachers for the broad field of general education. Conferences with individual staff members and with faculty committees gave an insight into problems of curriculum develop-

ment and instruction, and into types of services which are needed by institutions experimenting with programs of general education.

The need for a clearinghouse for information about the availability of curriculum materials and of reports of experimentation in general education was clearly established. So also was the need for a list of leaders who could be consulted about programs in their own institutions and the development of new programs elsewhere. The Division of Higher Education, therefore, has proceeded to collect information of this kind from institutions having substantial programs of general education. Data have been received so far from about 20 institutions, and the cooperation of other colleges will be sought in the fall. The information already received has been published in a loose-leaf circular and has been distributed to institutions of higher learning and interested professional organizations. Provisions are being made for periodic follow-up to keep this information service up to date.

Continuing education.—The Ford Fund for Adult Education has made possible a study of certain phases of continuing education. This project is reported in *A Study of Urban Public Adult Education Programs of the United States*, National Education Association, 1952. The Office of Education cooperated in this study, and the section on "Continuing Education for Adults in the Public Junior College" was prepared by a staff member of the Division of Higher Education. Data on meeting the cost of adult education programs were gathered by staff members of this and another Division, and published in the Office of Education Bulletin 1952, No. 8, *Financing Education in Selected Schools and Community Colleges*.

Equality of educational opportunity.—A study has been completed by a member of the staff of this Division which bears on the problem of equality of educational opportunity for white and non-white youth in the District of Columbia and the 17 States maintaining segregated school systems. Data have been compiled on the number of youth in each group enrolled in high school, graduating from high school, enrolled in college, and graduating from college. Information from the 1950 Census on the number of white and non-white youth of school-going age in these States makes possible comparisons that reveal the extent of present disparities.

A study has been begun to discover trends in the provision for higher education of Negroes. When completed it will provide up-to-date information on one phase of the educational status of a group which constitutes an important reserve of manpower. Of particular importance is information about the total number of Negro college students and the courses they are taking, the increased number of Negroes enrolled in Southern institutions of higher learning formerly closed to them, and the removal of racial restrictions in the employment of teachers and other professional personnel.

A staff member has cooperated with 13 private colleges for Negroes in the development of a cooperative testing program to facilitate the admission of qualified students, the awarding of scholarships, etc. More than 2,800 students were tested the first year.

INFORMATION ON PROGRAM COSTS AND STUDENT EXPENDITURES

Cost of Going to College.—There is a growing concern about the continuing rise in the cost of higher education. Such concern is expressed by college administrators, professors, boards of trustees, professional organizations, members of State legislatures, State and Federal governmental agencies concerned with education, as well as by the students themselves and their parents. There is a well-founded fear that rising costs are making it difficult if not impossible for children of low-income families to go to college, thus depriving the Nation of the leadership potential of a substantial segment of its youth. A proposal frequently made for bridging the gap between costs and the ability of students to pay is to provide increased aid through a statewide or nationwide plan of scholarships. At the present time, however, information is not available which would enable legislators or philanthropists to decide what is the best way to aid needy college students.

For the reasons given, the Division of Higher Education has undertaken to collect information on a nationwide scale about the costs students incur in college, how these costs are met, and the relationships which exist among the various cost factors, the sources of funds, and the size of family income. A questionnaire has been devised to obtain this information, and data are being obtained from about 30,000 full-time undergraduate students enrolled in 100 institutions of higher learning. In the published findings, names of students will not be disclosed, but institutions will be identified. It is planned to provide tabulations that take into account geographic location, age, sex, veteran-status, number of siblings, college class, program of study, and type of housing and boarding accommodations.

Student withdrawals.—During fiscal year 1953 the Division of Higher Education began a study of the effectiveness of colleges in retaining students admitted to various programs of study until these programs are completed. Some 20,000 students in about 175 colleges are included in this investigation. Field work on this project will not be completed until the class of 1954 graduates in June of next year.

In a period when there is a dearth of trained manpower the Nation can scarcely afford to have colleges retain to graduation fewer than half of the students they admit. The current investigation should determine some of the primary factors responsible for excessive withdrawals and provide a basis for initiating remedial measures. This project is the first of a series of studies dealing with student popula-

tion. Other studies will deal with the selection and admission of students, and the effectiveness with which college graduates are absorbed into the Nation's working force.

POLICIES AND PROCEDURES RELATING TO COLLEGE ACCREDITATION AND LICENSURE IN THE PROFESSIONS

Nationally recognized accrediting agencies and associations.—During the last quarter of fiscal year 1953 the function of the U. S. Commissioner of Education under Section 253 (a) of the Veterans Readjustment Assistance Act of 1952 (P. L. 550—82d Congress) was assumed by the Division of Higher Education. This portion of the Act requires the Commissioner of Education to publish a list of "nationally recognized accrediting agencies and associations which he determines to be reliable authority as to the quality of training offered by an educational institution."

Under this authority the Commissioner had issued in August 1952 the first provisional list of such accrediting agencies which included the 6 regional accrediting associations and 22 national professional accrediting associations. On October 4, 1952, the *Federal Register* published the criteria in terms of which applications of all accrediting agencies and associations seeking inclusion on the Commissioner's list should be evaluated.

During the past fiscal year the staff members assigned to this work have processed the applications of 16 agencies and associations. They have recommended the addition of but one of these agencies to the Commissioner's list of nationally recognized accrediting agencies.

State boards of dental examiners.—The American Association of Dental Examiners, in connection with its annual meeting, holds a seminar on dental examinations. The staff of the Division has been active in these seminars from their beginning in 1949. They have resulted in a marked improvement in the practices of State boards of dental examiners. They are also producing a better understanding between the boards and the schools of dentistry.

ADMINISTERING FEDERAL GRANTS AND SERVING LAND-GRANT COLLEGES

The staff of the Division has carried on activities related to the administration of Federal grants for resident instruction in the land-grant colleges and universities in accordance with the Morrill-Nelson and Bankhead-Jones legislation. Consultative services concerning the appropriations, the institutions, and legislation have been provided.

FURTHER INTERNATIONAL UNDERSTANDING

During 1951 and 1952 staff members at nearly 500 institutions cooperated with the Office of Education in a study of "Methods Used by

College Social Science Departments To Improve Students' Understanding of Post-World War II International Tensions." During fiscal year 1953 a publication with the same title (Circular No. 362) and based on the data thus obtained was written and distributed to respondents, deans of colleges of liberal arts, and to departments of social science not included in the sample.

In 1950-51 UNESCO held three international educational seminars dealing with the improvement of instructional materials and the teaching of history and geography. The findings of these seminars and problems raised by the participants have continued to be of interest to American teachers and to educators responsible for the preparation of teachers. A member of the Office staff took part in two of these UNESCO seminars and has served on a Panel on the Improvement of Instructional Materials of the U. S. National Commission for UNESCO. During the past fiscal year the staff cooperated with the Department of State by providing consulting services at regional conferences concerned with the problems discussed at the international seminars. These were held on the campuses of the University of Denver, the University of Florida, and George Peabody College. The staff has also provided consultant services to the UNESCO International Conference on Museum Education, held in Brooklyn last September.

During the year, two staff members helped to rewrite *The Story of the Declaration of Independence*, a pamphlet published and sold by the Government Printing Office. Complete responsibility was assumed for the section on historical background and the biographical sketches, and major responsibility for the preparation of teaching aids.

A member of the staff served as a member of the American delegation to the International Study Conference on the Atlantic Community, held at Queens College, Oxford University, England, September 6-13, 1952. He was named Chairman of the Interim Committee for the development of a program in this country in support of the North Atlantic Treaty Organization. More recently a permanent organization, the American Council on NATO, has been established with a representative of the Office as Vice Chairman.

VI. International Educational Activities

Education is an essential key to international understanding and peace. The Office of Education has been engaged in international educational activities since its establishment in 1867. The first report of the first U. S. Commissioner of Education—Henry Barnard in 1868—included a section on educational developments abroad, and an Act of 1896¹¹ reaffirmed this function as a specific statutory respon-

¹¹ 29 Stat. 140.

sibility of the Office. More recently, the work of the Office in the international field has taken on new significance as the services of American education have been enlisted in support of the foreign policy of the United States.

The Office of Education has been called upon to play a leading role in these developments through its Division of International Education. Its varied program includes research; the preparation and exchange of school materials; the exchange of experts, specialists, professors, teachers; programs for visiting trainees; the coordination and development of educational programs for underdeveloped areas; the recruitment of educational specialists to serve in education missions overseas.

The functions of the Office in internal education may be summarized as follows: (1) services to American education; (2) services to other Federal agencies, and national and international organizations; (3) services to education in foreign countries in accordance with international agreements; (4) services for the mutual benefit of education in the United States and in foreign countries. The first function has been the responsibility of the Office since its beginning and has always been financed through direct appropriation to the Office. The second function is an expanding one because of the current interest in international affairs, and it also is one for which the Office must make direct budgetary provision. The third and fourth functions, relating to the implementation of our foreign policy, are delegated to the Office by the Department of State and the Foreign Operations Administration, and are financed by transfers of funds originally appropriated to those agencies.

COMPARATIVE EDUCATION

In carrying out one of its basic responsibilities as a service to American education, studies were published in comparative education during the year—*Education in Sweden* and *Education in Turkey*. The manuscript of another study, *Education in Pakistan*, was completed, and a study of Norway's education system is in preparation. In addition to these studies, *Comparative Education News Notes*, a mimeographed circular issued at irregular intervals, helps keep the Office staff and comparative education specialists throughout the country abreast of recent developments in this field.

The Division supplied an advisory service to American educational institutions in interpreting the prior educational experience of some 2,600 students who came to the United States during the year from 101 countries. This involved the use of some 29 foreign languages. Services to American schools and colleges were expanded during the year by the inauguration of a series of *Teaching Aids for Developing International Understanding*. Analyses of the educational programs

of some 600 faculties and schools abroad were also made in order to advise the Veterans Administration concerning the status of certain courses in foreign institutions in which American veterans proposed to enroll.

Cooperation with international agencies concerned with educational problems gave rise to a considerable volume of activity during the year. Typical functions in this area included the review of various reports and documents submitted by international organizations and the preparation of official "position papers" for international conferences. Officers of the staff, at the invitation of the Department of State, participated in several of these conferences as members of the American delegation and advisers on educational affairs.

Considerable attention was given during the year to the role of foreign languages in the American schools. A 2-day national conference on this subject was held in January 1953, in response to widespread interest in the expansion and improvement of foreign language teaching. More than 350 educators and lay leaders from 31 States attended.

With the cooperation of the American Textbook Publishers Institute, an Educational Materials Laboratory was established during the year, bringing together in one spot reference copies of most of the school textbooks presently available through regular publishing channels. Through this Laboratory the Office is able to provide an unusual and valuable reference service to foreign visitors and to United States personnel working in technical assistance programs abroad, as well as to educators in this country who wish to examine the latest educational materials and texts.

TECHNICAL ASSISTANCE IN EDUCATION

In providing professional advice and assistance to the Technical Cooperation Administration (now a part of the Foreign Operations Administration), the Division proposed and gained acceptance for the development of technical assistance programs in education based essentially on three types of education: *community education*—basically functional education, concerned with improving all aspects of living in the community; *fundamental education*—basically community education where there is no formal school system or the formal school is wholly inadequate; and *technical education*—concerned with helping the individual to acquire the knowledge, skills, and attitudes necessary for increased productivity. Members of the staff visited a number of the underdeveloped areas to advise the TCA and foreign Ministries of Education in the application of modern ideas and techniques to the solution of urgent educational problems.

Additional services rendered to what is now the Foreign Operations Administration included recruitment of education specialists to

fill positions in technical assistance missions overseas. For the technical assistance program, the Office employed 43 educators and assigned them to 12 countries in the Near East, Africa, and South Asia. The Office also recommended qualified personnel for employment by the Mutual Security Agency to fill 18 educational positions in American missions in Southeast Asia.

Professional advice or technical evaluation has been supplied on request from the education personnel in the field concerning education programs, equipment, and materials. This service has included review of lists of vocational school shop equipment and textbooks prepared in the field, examination of lists of instructional materials and supplies proposed for use in elementary and secondary schools, preparation of bibliographies designed to meet particular needs, and review of project agreements proposed to be signed as a basis for establishment of education programs in several of the participating countries.

TEACHER AND LEADER PROGRAMS

During the past year, the Division planned and arranged programs of instruction, study, and travel for almost 800 foreign education leaders, teachers, and trainees. Individual programs were planned for 142 trainees. They came from 22 countries and were brought to the United States for technical training in diverse fields. Also, programs were planned for 312 teacher education grantees under the Fulbright and Smith-Mundt Acts. The teacher grantees were assigned for the first 3 months to 1 of 12 participating colleges and universities where special coordinators devoted their full time to arranging a balanced educational and cultural program. These teachers were then sent in smaller groups to work for a week with a State department of education, and then for 4 weeks in the schools of a single community in 1 of 19 States. In addition, the German Teacher Education Program brought 111 teachers from West Germany this past year.

Under the leader and specialist program, plans were made for 195 leaders. This program, which has been the responsibility of the Office since early in 1952, provides for visits of key people in education from many countries. Visitors represent all fields of education and include representatives of Ministries of Education; college presidents; superintendents of schools; directors of rural education; and a variety of others, many of whom are in policy-making positions in their own countries.

A number of specialists were recruited for a "Workshop on Modern Psychologies and Education," which was held in Frankfurt, Germany.

Another program administered by the Division arranges for the exchange of teaching positions between American and foreign teachers, and recruiting teachers to serve abroad. During the past

year, 244 teachers were placed—141 in interchanges and 103 in one-way appointments.

McCARRAN ACT

Under the provisions of the Immigration and Nationality Act of 1952 (Public Law 414, the so-called McCarran Act), the Attorney General of the United States was directed to consult with the Office in carrying out his responsibility for the approval of schools for study for non-immigrant aliens coming to this country under student visas. During the year, the Office consulted with representatives of the Office of the Attorney General relative to the approving of 523 "Petitions of Approval of Schools for Students." The Office also cooperated in the development of statements of policy, operating instructions, and sets of criteria for the orderly processing of these petitions.

INTER-AMERICAN SEMINAR ON VOCATIONAL EDUCATION

In cooperation with the Pan American Union, the Institute of Inter-American Affairs, the International Labour Office, and the University of Maryland, the Office functioned in August and September 1952, as a co-sponsor of an Inter-American Seminar on Vocational Education, which was held at the University of Maryland. The seminar group was composed of official representatives, specialists, and observers from 19 of the 21 countries comprising the Organization of American States. A total of 141 official representatives, specialists, and observers were registered in the seminar from these countries. Principles and practical procedures for the sound development of vocational education in the Pan American countries were discussed and agreed upon. These principles now constitute an important contribution to the further development of vocational education in the Americas. Follow-up and liaison techniques and procedures are being developed by the sponsoring agencies to support continuing growth in vocational education throughout the membership of the Organization of American States. The success of these international programs was due in large measure to the willingness on the part of educational institutions and organizations throughout the country to cooperate with the Office in making local arrangements for the visitors.

SUMMARY

During the first year of the existence of the Division of International Education a number of problems in administration and professional relationships began to be resolved. A management survey resulted in the establishment of a new divisional structure. Competent specialists were recruited to staff the Division. Important evaluative studies were made. Procedures have been reviewed and refined. An out-

standing achievement was the establishment and maintenance of cordial and effective working relationships with Federal agencies, with State and local school systems, and with private educational institutions and organizations throughout the country. One evidence of achievement is the following resolution adopted in June 1953, by the National Council of Chief State School Officers:

A basic need in the defense of the free world and in the ultimate attainment of a just and lasting peace throughout the world is the development of international understanding. We commend the U. S. Office of Education for its effective administration of the several programs which contribute to this end and for its establishment within the Office of an international branch, which doubtless facilitates the discharge of its many responsibilities in this area.

VII. Research and Statistical Services

Research and the systematic collection and interpretation of the pertinent facts are by general consent the basis for solving many of our educational problems. The Research and Statistical Standards Section is the principal unit through which the Office of Education collects, assembles, and prepares statistical data.

This Section provides research and statistical services to the various specialized divisions of the Office and serves in an advisory capacity in determining the feasibility of proposed research projects and the manner in which such projects can best be carried out. It also provides information, advice, and assistance requested by State and local educational agencies and by individual schools and institutions of higher learning.

State departments of education, city school systems, school principals, college officials, and others are the principal sources of statistical information. The Office relies upon their voluntary cooperation in the gathering of data. These sources of information are at the same time recipients of the benefits of research to which they have contributed. Thus the Office acts as a clearinghouse for the gathering, analysis, and dissemination of the facts that school officials and educational institutions want and need in their efforts to cope with the Nation's educational problems.

The Research and Statistical Standards Section prepares special surveys which are of great importance to the areas they serve. Some of these surveys are produced in collaboration with other divisions of the Office and other agencies of the Government. Such projects present valuable compilations of basic data for educational statesmanship.

The usefulness of this information-gathering function has been especially well illustrated during fiscal 1953. Periodic data from the *Biennial Survey of Education*, the *Survey of Fall Enrollment*, and a special survey of *Korean Veterans in College in the Fall of 1952*

were used to provide tables for House hearings on Public Law 550 (Veterans Readjustment Assistance Act of 1952). The periodic data were also basic in making two important forecasts: (1) a projection to 1960 of enrollment in elementary and secondary schools, by grade, for the third report of the *School Facilities Survey*; and (2) a projection to 1964 of the production of scientists by colleges and universities in the United States.

Extensive liaison and staff services were rendered on such subjects as: child-care needs in the city of Wichita, Kans., a cooperative study by the Children's Bureau, Women's Bureau, and the Office of Education; qualifications and training of teachers of exceptional children; costs incurred by students attending college; special provisions for rapid and slow learners; retention and withdrawal of college students; the common core of State educational information.

Among the major statistical publications of the year was included the *Directory of Secondary Day Schools, 1951-52*. Some 25,000 public and non-public schools are listed in this study, with statistical and accreditation data for each school. (The data on accreditation in this publication are based exclusively on reports from recognized accrediting agencies; the Office does not itself accredit any schools.) This *Directory* has a unique value because of the extent of its coverage, its completeness, its uniformity, and its convenient size and format. With improved methods of compiling data and technological changes in printing, the volume was produced much faster than previous editions, with a substantial reduction in the cost of printing and publication.

A noteworthy response-rate of over 99 percent was achieved in compiling data for the study on *Statistics of Special Education for Exceptional Children*. Since sampling was neither desirable nor feasible in this type of specialized survey, the data were gathered by direct mail inquiry. The survey included, for the first time, all types of public-school systems. (Previous studies were restricted to city school systems.) The all-inclusive direct coverage of this survey is a landmark among statistical studies of the Office.

In order to expedite the publication of data relating to small- and medium-sized cities, plans were made to divide the annual report on *Current Expenditures Per Pupil in City School Systems* into two parts. This procedure was employed also to hasten the publication of *Statistics of Higher Education*.

Because of the increase in the number of cities between the 1940 and 1950 Censuses, a partial sample technique has been used to reduce by 40 percent the number of cities handled for *Statistics of City School Systems*. Only 2,335 of the 3,786 cities are to be used in the study. However, in order to provide for a reasonably adequate number of comparisons among cities within each State, sampling has been

restricted to certain States, and to cities within certain size categories.

Each year the Office faces the problem of slow reports from some of the State departments of education. This delay has frequently led to late publication of the report on *Statistics of State School Systems*. In an attempt to meet this problem in fiscal year 1953, a reasonably prompt estimate of United States totals for the 48 States was published (Circular No. 352) on the basis of data received from the first 24 States reporting.

VIII. Reports and Technical Services

The Reports and Technical Service Section is an Office-wide service authorized "to promote the cause of education throughout the country" through publications, the press, radio, television, and other media which reach the educational profession and the public in general. This Section performs a wide variety of regular and special services for the various Divisions of the Office, other agencies of Government, and organizations concerned with problems of education.

Publications mirror all of the diverse activities of the Office and serve to illustrate the program of the Office as a whole to the educational world and to the general public. They are the chief means for the dissemination of Office research findings and other significant data. They represent the most important avenues of service to school systems, educators, and all others interested in the problems and progress of education.

As part of the statutory function to diffuse information concerning education, two official periodicals—**SCHOOL LIFE** and **HIGHER EDUCATION**—are published monthly and semimonthly, respectively, during the school year. **HIGHER EDUCATION**—which is produced in collaboration with the Division of Higher Education—provides information on Federal activities and policies related to college and university education, reports studies of higher education made by the Office, includes materials from institutions of higher learning and from educational organizations on their policies and activities, and lists new Government publications on education and non-government publications on higher education. **SCHOOL LIFE** keeps its readers informed of important trends in American education. It summarizes research projects of the Office, presents pertinent statistics, reports on Federal activities in education, and offers much additional information useful to educators and the public. All new publications of the Office of Education are announced in **SCHOOL LIFE** each month.

As an economy measure, the free list of **SCHOOL LIFE** was reduced during fiscal 1953 from 10,000 to 2,000 copies. There are approximately 6,300 paid subscriptions. It is expected that this figure will increase during the coming year.

In addition to 40 major publications, 125 processed materials were issued during the year, including bibliographies, a special series of bulletins for the elementary and secondary schools, etc.

Approximately 36,000 pieces of correspondence were handled during the year. Of these, some 4,700 were letters on educational matters addressed to the White House and referred to the Office for reply.

Major cooperative projects undertaken during the fiscal year included:

1. Cooperation with the Atomic Energy Commission and the Federal Civil Defense Administration in preparing a special issue of *SCHOOL LIFE* on the theme "Citizenship for the Atomic Age." This was issued as a supplement to volume 35, September 1953. Sixty thousand copies were printed and distributed.

2. Planning of arrangements for the selection of the 1954 Teacher of the Year in cooperation with the National Council of Chief State School Officers, *McCall's Magazine*, and the National School Public Relations Association.

3. Direction of the Joint Workshop of the Educational Press Association of America and the Department of Classroom Teachers of the National Education Association on improving the effectiveness of educational publications.

4. Planning with the National Education Association, the National Congress of Parents and Teachers, and the American Legion for the 1953 observance of American Education Week.

5. Planning and arranging for the 1953-54 Better Schools Campaign in cooperation with the Advertising Council and the National Citizens Commission for the Public Schools.

6. Cooperation with the National Association of Radio-Television Broadcasters, the Junior Chamber of Commerce of the United States, and the Radio Manufacturers Association in the annual Voice of Democracy contest.

IX. *Termination of Civilian Education Requirements Program*

With the close of fiscal year 1953, the functions of the Office of Education as the claimant agency for education under the Defense Production Act of 1950 came to an end.

These functions, undertaken first under Executive Order 10161 of September 9, 1950, and Department of Commerce Order No. 127 of November 20, 1950; and subsequently expanded under Executive Order 10200 of January 3, 1951, and appropriate delegations from the Defense Production Administration and the National Production Authority, ultimately included full responsibility for the operation

of the claimant agency program with respect to schools, libraries, museums, and higher educational institutions.

A special Division of Civilian Education Requirements was established in September 1951 to carry out these responsibilities and functioned in this capacity until June 30, 1953. The operations of this program were a major factor in maintaining essential educational services throughout the country during a period of critical shortages of construction materials, equipment, and supplies for school construction, operation, and maintenance.

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From the Annual Report of the

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

1954

Annual report, 1953/54

Office of Education

DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

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I. Introduction

THE BASIC functions of the Office were defined by Congress in 1867, when the Office was established. These functions are:

1. To "collect such statistics and facts as shall show the condition and progress of education."
2. To diffuse "such information [on education] as shall aid the people of the United States in the establishment and maintenance of efficient school systems," and
3. "Otherwise [to] promote the cause of education."

These responsibilities are fulfilled in many ways, but basically by studies and research on many aspects, both quantitative and qualitative, of education in America, and, to some small degree, on education abroad. Findings are made available by or through dozens of major publications, by means of conferences and workshops in Washington and over the country with both professional and citizen groups, by means of answers to more than half a million inquiries annually, and through two periodicals—*School Life* and *Higher Education*.

The second aspect of the work is that of administering a variety of programs for which the Office of Education has become responsible through the years. For example, the Office budget in 1954 amounted to \$2,911,402 for its basic services (\$1,411,042 of which was for administration of grants) and \$228,213,092 in grants administered. It administered \$197,350,000 in payments to school districts for the construction and operation of schools in what have come to be known as "federally affected" areas. Likewise, it administered \$25,811,591 for vocational education in local communities and disbursed \$5,051,500 for colleges of agriculture and mechanic arts.

In addition, it spent \$469,360 administering programs for the Foreign Operations Administration and the State Department amounting to \$1,929,184.

The Office of Education is guided by the following principles:

First, that the schools are the people's schools. And by "the people" is meant all the people: parents, nonparents, teachers, and children. All have a stake in education and all share in the responsibility for making the schools the best possible.

Moreover, the Office of Education holds that the schools must be accessible. Sound practice, responsiveness to the citizenry, and democracy require this. Schools should not be controlled to perpetuate any political party, nor any organized group in society—including the teaching profession—nor any special interest. In effect, the schools must serve all the people, and they must be responsible to all the people.

In calling the schools "the people's schools," it is clear that varying local, State, and national interests in educational policies, in procedures, and in organizational methods must recognize and provide for relating their diverse interests effectively.

For its part, the Office of Education respects the pattern of 48 independent State school systems which delegate much responsibility and give freedom in operation to local school units. It accepts the role of the Federal Government as that of assisting and strengthening the 48 State systems and their local school units with a view to helping them to carry on their responsibilities without Federal domination, control, or interference.

A second cardinal principle which guides the Office of Education is that it should demonstrate belief in democratic process and in education as it carries out its responsibilities of national leadership.

It tries to do so by getting the facts and interpreting their significance objectively so that they can be understood and put to use by those responsible for the schools—the American citizenry.

The Office seeks to discharge its national responsibilities also by administering efficiently the programs for which it is responsible.

It seeks also to present to the people's representatives—the administration and the Congress—all the pertinent facts regarding education, as well as proposals for strengthening it that are consistent with the principles which guide it. In a real sense its responsibility is a teaching one—to study, to interpret, and to ask and to answer questions.

To strengthen its services to education, the Office, during 1954, requested, as a part of the administration's legislative program, and was granted by Congress, with approval by the President, on July 26, 1954, the following:

A. Funds and authority for educational conferences in each State and for a White House Conference on Education, to stimulate in-

creased State and local action to meet present and impending educational needs.

B. Authority to increase educational research. Authority was granted the Office of Education to engage in cooperative research with colleges, universities, and State departments of education. Also an Advisory Committee on Education was authorized to identify major problems in education needing commission-type studies and to recommend appropriate action to implement findings of such studies.

The Office of Education program is shaped in part by congressional action and at times by decisions of the Supreme Court. It is therefore perhaps appropriate to note briefly congressional acts and a Supreme Court decision in 1954 of special consequence to the Office of Education and to education in the United States.

Public Law 731, approved August 31, 1954, an amendment to Public Law 815, 81st Congress, provided for a 2-year extension of the program of assistance to school construction in federally affected areas under title III of that act.

Public Law 732, approved August 31, 1954—an amendment to Public Law 874, 81st Congress—postponed the effective date of the 3-percent “absorption” requirement for 1 year.

Other items of educational interest include the following: *Public Law 325*, approved April 1, 1954, provided for the establishment of the United States Air Force Academy; *Public Law 610*, approved August 20, 1954, extended the period during which certain veterans educational and training benefits may be offered; *Public Law 733*, approved August 31, 1954, authorized the Commander of the Air University, under certain conditions, to confer advanced degrees upon students in the Resident College of the U. S. Air Force Institute of Technology; *Section 37 of Public Law 591*, approved August 16, 1954 (Internal Revenue Code of 1954), liberalized taxes on retirement income so as to give most retired teachers tax credit of \$240 on that income; and *Public Law 719*, approved August 30, 1954, granted the consent of Congress to certain New England States to enter into a compact relating to higher education and establishing the New England Board of Higher Education.

The year 1954 was made notable also by action in another area which has far-reaching implications for America's schools and colleges; namely the decision of the United States Supreme Court in the school segregation cases. These cases had been argued before the Court in the 1952 session, but no decision was handed down. They were, however, restored to the docket for reargument, which took place in December 1953.

On May 17, 1954, the Court handed down a decision that racial segregation in the public schools is unconstitutional, on the ground

that it deprives the children of a minority group of equal educational opportunities.² Later the cases were again restored to the docket and the parties were requested to present further argument concerning the implementation of the Court's decision by specific decrees. Argument for this purpose was scheduled by the Court for December 1954.

During fiscal year 1954, three persons served as Commissioner of Education. The first was Dr. Lee M. Thurston, who became the 12th U. S. Commissioner on July 2, 1953. He brought to this office experience as public school teacher, school superintendent, college professor and head of the State Department of Public Instruction of Michigan. He conducted the Office program, in the new Department of Health, Education, and Welfare, with such vigor and understanding that, after a span of only 2 months, he had won the confidence and support of colleagues and the profession. A heart attack brought about his untimely death on September 4, 1953.

The responsibility of acting commissioner was assigned to Dr. Rall I. Grigsby, Deputy Commissioner, who served until Dr. Samuel Miller Brownell took the oath of office as the 13th U. S. Commissioner of Education on November 16, 1953. Dr. Brownell came to the position from a professorship of educational administration in the Yale University Graduate School and from the presidency of New Haven (Conn.) State Teachers College. He also brought earlier experience as a public school teacher, high school principal, and school superintendent.

II. Major Educational Problems Confronting the United States in 1954

All Americans are aware of the importance of education to the strength and vitality of our Nation. The security of this country and the hopes of the free world depend in great measure upon the character, the ideas, the ingenuity, and the competence of each successive generation of young people. The complexities of today's world call for broader knowledge, greater skill, and deeper understanding. Hence, education, whether at home, at church, or in our schools, is more important than ever before to the continued well-being of the Nation.

Our national security and well-being depend in large measure on the education of Americans to fulfill their responsibilities in a free society. President Washington recognized this need when he wrote:

The mass of citizens in these United States mean well, and I firmly believe that they will always act well whenever they can obtain a right understanding of matters; but * * * it is not easy to accomplish this

² *Brown v. Board of Education*, 74 Sup. Ct. 686 (1954).

* * * when the inventors and abettors of pernicious measures are infinitely more industrious in disseminating their poison than the well-disposed part of the community to furnish the antidote.

These comments are especially fitting under today's world conditions. They highlight the need to provide the best possible education for each and every American.

President Eisenhower referred to our present needs in his State of the Union Message when he said: "Youth—our greatest resource—is being seriously neglected in a vital respect. The Nation as a whole is not preparing teachers or building schools fast enough to keep up with the increase in our population."

Vigorous efforts are being made by many States and local communities to provide better educational opportunities, but the statistics on present enrollment, on projected enrollment, on our classroom shortage, on teacher shortage, on school dropouts, and on inadequate education make clear the needs for prompt and constructive action.

In facing these problems, State by State, it would seem appropriate to have evidence gathered and presented which would demonstrate to what extent and in what ways it is possible to meet the needs by combined use of State and local resources as presently constituted or as modifications might be made.

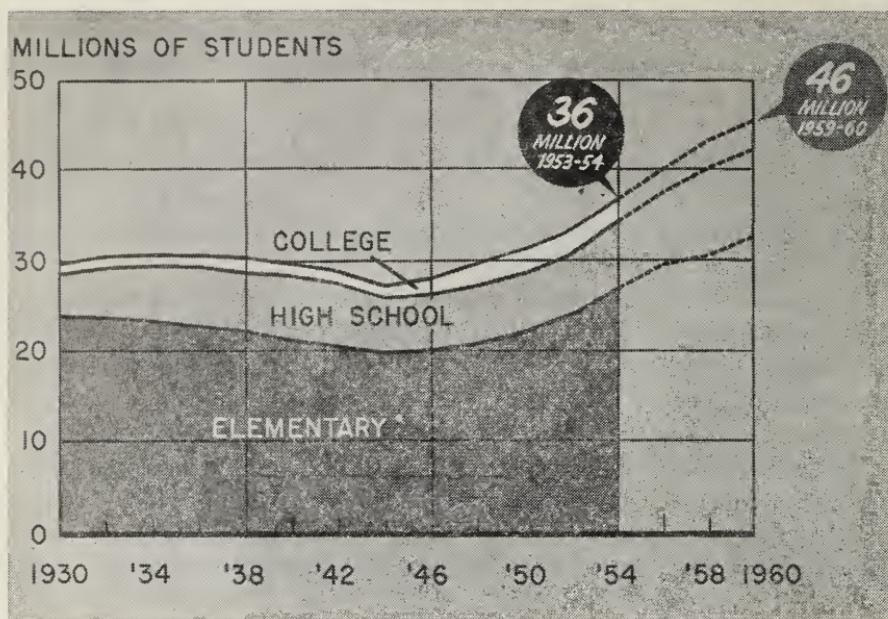
ENROLLMENT GROWTH IS AND WILL BE GREATLY INCREASED

One of the specific challenges facing America is the need to educate new millions of students. We have approximately 11 million young people in the 15- to 19-year-old age group; approximately 16 million children in the 5- to 9-year-old age group; and about 17 million youngsters in the group under 5 years. These rising waves in the school-age population are clear calls to action.

The impact on elementary schools, high schools, and colleges is obvious. In the academic year 1954-55 we shall have approximately 38 million students in school and college. Looking ahead to 1960 we can forecast at least 46 million enrolled at all levels of the educational system, *provided that* housing and staff facilities are available. Moreover, this estimate of future enrollment is a conservative one. If the trend for a larger percentage of 5-, 6-, and 7-year-olds to be in school and for a larger percentage of 16-, 17-, and 18-year-olds to stay in school continues, then the estimate of 46 million in 1960 will have to be revised upward. A rise in enrollment after 1960 is also to be expected in view of the larger number of family units which will develop in the 1960's.

If we are to meet the individual and collective challenge that these millions of young people constitute, we must provide the kind of education which develops in each youth the skills and insights to make him a productive citizen in a free republic.

Chart 1.—INCREASED SCHOOL ENROLLMENT, 1930-54, AND PROJECTED ENROLLMENT, 1954-60



*Elementary-Kindergarten through grade 8.

THE NEED FOR MORE PREPARED TEACHERS AND MORE BUILDINGS IS ACCENTED BY A BACKLOG OF DEFICIENCIES

Past inaction complicates the task of providing necessary school buildings and equipment. Today we do not start "at scratch." We have instead a deficit problem on our hands.

The Office of Education's *Report of the Status Phase of the School Facilities Survey* reveals that in September 1952, the Nation was short 312,000 public elementary and secondary classrooms and related facilities. It is estimated, that for the school year 1954-55, the classroom deficit will be approximately 300,000. The construction rate in 1953-54 of approximately 55,000 classrooms a year will have to be significantly increased if we are to provide adequate and satisfactory school housing for American boys and girls.

Maintaining an adequate supply of well-prepared teachers is one of our most pressing responsibilities. Unfortunately, we cannot buy able and devoted teachers, as we can buy classrooms.

We shall begin the school year 1954-55 with a shortage of about 120,000 prepared teachers for grade and high schools. A large proportion of that number are needed to eliminate one-half day sessions; the others are needed to replace those teachers having less than standard certification—which in one State is only high school graduation including some special "normal training."

Chart 2.—PUBLIC SCHOOL CLASSROOM SHORTAGE, 1930-60

Assuming 1954-55 rate of construction and 1952-60 estimates of need based on preliminary results of State school facilities survey

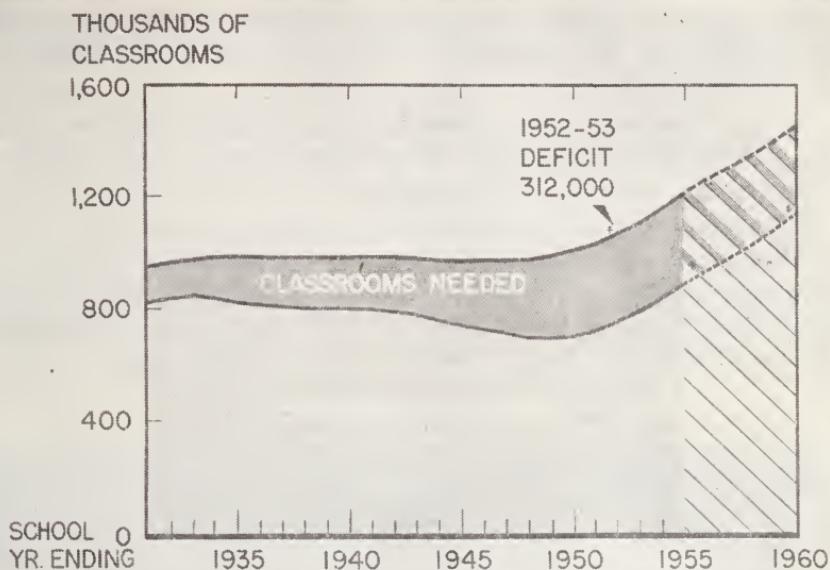
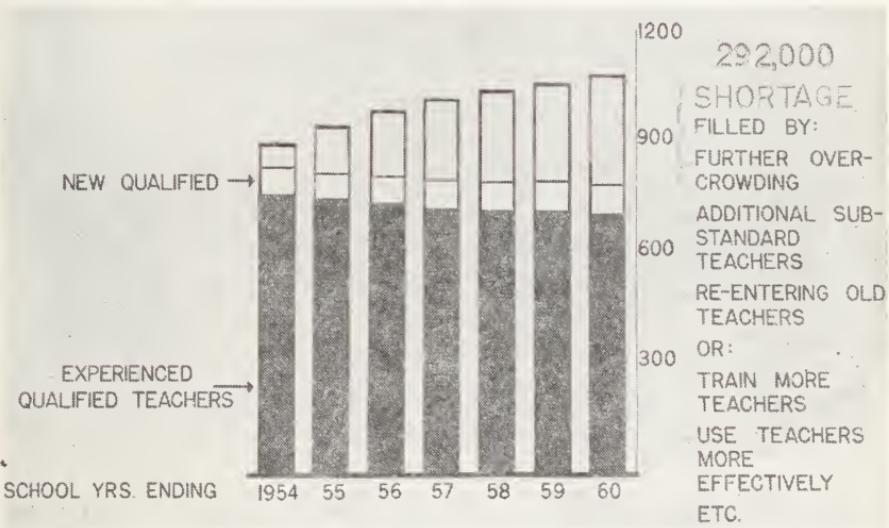


Chart 3.—ELEMENTARY TEACHER SHORTAGE, 1954-60



We must recruit more teachers, and we must take steps to see that every teacher is used as effectively as possible by such means as eliminating one-room schools with few pupils or very small high schools; and keeping teachers in the profession for a longer period of time.

In the years immediately ahead, we face increasing teaching needs at the high school and college levels. Unless we take steps now to

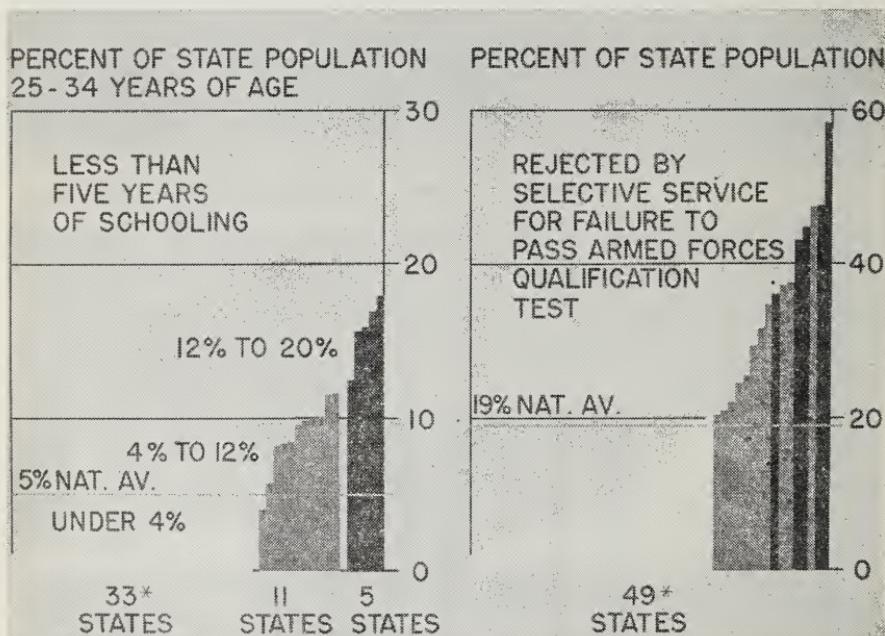
develop our teacher resources we run the risk of shortchanging a whole generation of students and the future of our Nation.

SHORTAGES OF TEACHERS, SCIENTISTS, NURSES, AND OTHER TRAINED PERSONNEL IS AGGRAVATED BY THE LOSS OF POTENTIAL RESOURCES

If education had been adequately financed in the past, we should not now be facing the tragic wastes of manpower which arise from illiteracy and dropouts from school.

We have a shortage of trained manpower in many fields; we need more scientists, we need more doctors and dentists, we need more teachers. At the same time, we need educated citizens who can contribute fruitfully to the complex demands a free society imposes on men of good will to act wisely for the common good.

Chart 4.—INADEQUATE EDUCATION: 1950



*Includes the District of Columbia.

And yet in 5 States, from 12 to 18 percent of the population between the ages of 25 and 34 years have fewer than 5 years of schooling. These people are what we call functionally illiterate. In 11 other States, the percentage is from 4 to 11 percent in the same age group. Our concern nationally about this situation is highlighted when we note that, in 5 States, Korean war draft rejections caused by failure on the Armed Forces Qualifications Test run 43, 45, 47, 48, and 58 percent against an overall national average of 19.2 percent. This

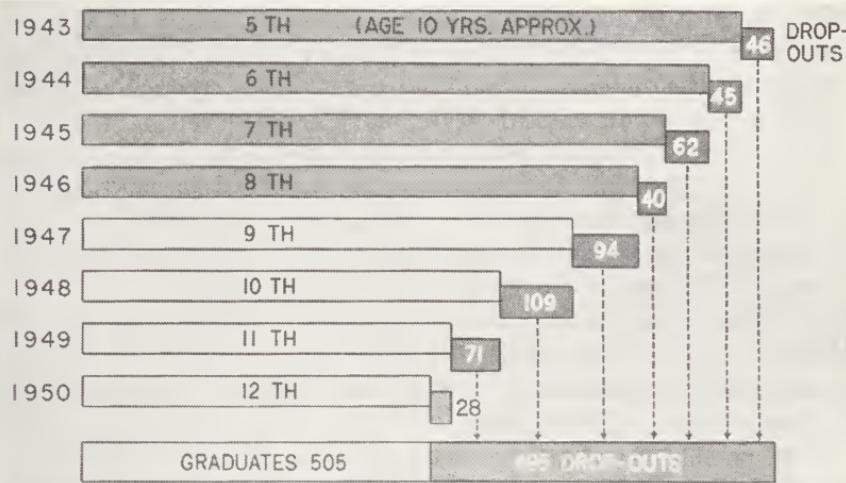
constitutes an appalling national waste. It confronts all States with greater demands on their manpower.

Significant progress has been made in fundamental and literacy education, particularly in the education of Negroes. Since 1940 the number of functional illiterates 25 years old and over has been reduced by 650,000. However, when we face the fact that there are, according to the 1950 census, 9.5 million functional illiterates 25 years old and over, we can understand the seriousness of this problem in terms of our need for trained manpower.

The extent to which potential trained manpower in the Nation has been lost is also revealed by the school retention record of the children entering public school 5th grade in 1943. By the end of the 8th grade nearly 200 of every 1,000 in this class had left school; by the end of

Chart 5.—SCHOOL DROP-OUTS: HISTORY OF ONE CLASS

Rate of drop-outs per 1,000 children entering grade 5 in 1943



the 10th grade, 200 more. About 100 dropped out in the 11th and 12th grades. In other words, just about 500 of the 1,000 children who were fifth-graders in 1943 finished high school.

Although there is a close relationship between dropouts and functional illiteracy, delinquency, social and economic competence, and military service, figures show that those who drop out of school are not necessarily the least able ones. We lose each year hundreds of thousands of able youngsters. This loss is a serious national handicap. National and State groups are cooperating to correct the "dropout" situation; progress is being made, as is indicated by more than a 25-percent increase in the holding power through high school graduation since 1946. This is, however, a continuing problem which requires continuing attention.

Our national needs for citizens trained to fulfill their civic and technological responsibilities indicate that we must take positive steps to enlarge our educational opportunities and to provide each American youth with the best education possible.

The responsibility of facing and meeting these problems is that of our Nation as a whole. No agency, no group, no individual, nor any fragmentary collection of these can successfully meet the challenges outlined. They call for devoted and energetic action by an informed and enlightened citizenry. The Office of Education seeks to strengthen such efforts. It does so in many ways. Some of these are outlined in later pages of this report. Others have been mentioned briefly in terms of the contributions the State and White House Conferences can be expected to make to education, and those that legislation strengthening the research functions of the Office can effect.

Under Public Law 530, a series of State and Territorial conferences on education were authorized, to be followed by a White House Conference on Education late in 1955. The preliminary conferences are to enable educators and interested citizens in each State to discuss the educational problems of their State and make recommendations for appropriate action at local, State, and Federal levels. An appropriation of \$700,000 for the State conferences is to be allotted among the States on the basis of their respective populations, but with no State receiving less than \$5,000. In accepting its allotment, each State agrees to report the findings and recommendations of its State conference for the use of the White House Conference.

The White House Conference on Education, scheduled to be held in Washington, D. C., November 28–December 1, 1955, will be a conference broadly representative of educators and other interested citizens from all parts of the Nation. It will consider and report to the President on significant and pressing problems in the field of education. An appropriation of \$200,000 for fiscal 1955 was made available for this Conference. The Commissioner of Education is authorized to accept and use funds, equipment, and facilities donated for the purposes of the Conference.

The White House Conference will be planned and managed by a committee of citizens and educators appointed by the President as representative of varying political, religious, racial, educational, and nonschool interests. The committee operates as an independent agency directly responsible to the President. It is not a part of the Office of Education, although it is assisted by the resources of that Office. The committee will determine the agenda for the Conference, its plan of organization, and participation in Conference matters by representatives from the States. The committee will also be responsible for followup reports to the Nation at the conclusion of the Conference.

In a letter to the State Governors, President Eisenhower indicated

that he viewed the Conference as an opportunity to determine what steps Americans can take at local, State, and national levels to insure the best possible education for American youth.

A bill enacted as Public Law 531, approved July 26, 1954, authorized the Commissioner of Education to enter into contracts or jointly financed cooperative arrangements with universities and colleges and State educational agencies for the conduct of research, surveys, and demonstrations in the field of education.

Public Law 532, approved July 26, 1954, provided for the establishment within the Department of Health, Education, and Welfare of a National Advisory Committee on Education, to supply the "advice of a group of representative citizens on the initiation and conduct of studies of problems of national concern in the field of education and on appropriate action as a result thereof. * * *" The Committee is to be composed of nine members, a majority of whom shall be other than professional educators. The Commissioner of Education is to be, ex officio, a nonvoting member of the Committee. An appropriation of \$25,000 was made available for the expenses of the Committee during the fiscal year 1955. The Committee is to meet not less often than three times each calendar year.

III. Services to Education in the United States

One of the major and traditional functions of the Office of Education is to provide information, consultation, and advisory service concerning the operation of State and local school systems throughout the Nation.

The major organizational units in the Office share in carrying out this responsibility. Highlights of these services in 1954 are in the sections which follow.

A summary which attempts to highlight activities of an organization tends to catalog observable achievements such as publications issued, money disbursed, conferences held, and the like. This summary is typical in that respect. However, the listings that follow can only suggest the services rendered. The significance of these services lies in less tangible elements. If these publications, if this money, if the conferences and other activities caused citizens and educators to provide children with more effective, more efficient educational experiences they were wise activities, and publications, and conferences. This summary does not attempt to produce evidence of the value of Office activities. It points out, however, an awareness that activities are means to an end, not ends in themselves. It comments that the Office is concerned with the significance of its services rather than with compiling a record of documents and activities.

STATE AND LOCAL SCHOOL SYSTEMS

The vastness of the American educational enterprise (26 million elementary school children in 134,000 schools and 7 million secondary school children in 27,000 schools in 1953-54) and the long tradition of State and local control of education have led the Office to rely very heavily upon the departments of education in the various States as intermediate points of contact. During recent years much of the work of the Office has been carried on in close collaboration with the State departments, including many joint conferences and parallel activities on educational problems of common interest and concern.

The services provided by the Office to State and local school systems are widely diverse and varied. Yet they are all directed at the common statutory objective of aiding "the people of the United States in the establishment and maintenance of efficient school systems."

State School Administration

The research program in State school administration during fiscal 1954 was focused on two major areas: (1) State educational organization, and (2) State educational records and reports. A series of studies was initiated on The State and Education, Part I of which it is entitled *The Structure and Control of Public Education at the State Level*. This study was designed to provide information for States which will embark on the task of reorganizing and revitalizing their State educational administration machinery in the immediate years ahead. This study will be printed in fiscal 1955.

Continued progress was made in implementing *The Common Core of State Educational Information, Handbook I*, of the State Educational Records and Reports Series. A companion pamphlet was completed in cooperation with State department of education representatives entitled, *Suggested Program for Putting Into Practice Handbook I, The Common Core of State Educational Information*. In addition, the data-collection program of the Office of Education was revised to correspond with *Handbook I* beginning with the Biennial Survey for the school year ending in June 1954. Work was initiated on *Handbook II, Financing Accounting for Local and State School Systems*. Considerable basic research was conducted as a necessary prerequisite to this second phase of the nationwide financial accounting project.

Local School Administration

Information was collected from 16 States as part of a study involving intensive investigation of the reorganization programs in 16 States where redistricting activity, involving participation by local

people, is currently, or has been recently, underway. Work on the study has involved identification and evaluation of a wide variety of factors influencing local people in establishing more effective school districts. These factors include: (1) the reorganization legislation, (2) State leadership and services, (3) local techniques and procedures, and (4) school finance provisions.

Descriptions of the redistricting programs were prepared for six of the States participating in the project and were checked for completeness and accuracy with State department of education personnel. Analyses of the State-by-State descriptions are being prepared for each of the four areas noted above. These analyses will be used as the basis for developing statements of policies and procedural steps which should characterize a sound redistricting program.

School Finances

Expenditures for Education at the Midcentury was distributed near the end of December 1953. In this study the average expenditure per classroom unit was determined for 63,402 separate school districts in the 48 States and the outlying parts of the Nation. The median for the Nation was \$4,391, and the medians for the low and high States were \$1,451 for Mississippi and \$7,627 for New York, respectively. The report provides information designed to be useful to legislators and educators in planning the improvement of State and local systems for financing the public schools.

A supplement to *Expenditures for Education at the Midcentury* was published and distributed in March 1954. Twelve States were included in this supplementary study because they had separate data for white and Negro children.

A study of Federal funds for education was completed during fiscal 1954. In preparing this report on Federal funds, the Office analyzed data and provided descriptions of 56 different programs. Amounts expended and allocation procedures are given along with public law citations authorizing the Federal expenditures. The report was published as Office of Education Bulletin 1954, No. 14, and entitled, *Federal Funds for Education, 1952-53 and 1953-54*.

Another report entitled, *Public School Finance Programs of the United States*, was issued as 1954, Misc. No. 22. It gives estimates of revenue for the 1953-54 school year, describes the various State funds allocated to local school districts, and indicates procedures by which boards of education obtain local taxes for public education.

School Legislation

At the request of the Study Commission of the National Council of Chief State School Officers, a comprehensive summary on *The Legal*

Status of State Supervision Over Nonpublic Schools was prepared. This was used as basic data by the Commission in its workshop conference on that subject at the December meeting in Chicago.

School Facilities

During fiscal 1954 the Office published the *Report of the Status Phase of the School Facilities Survey*. Work was continued on the long-range planning phase of the Survey, and a report will be published in fiscal 1955 on the projected plans for school facilities to replace unsatisfactory facilities, to relieve overcrowding, and to accommodate enrollment forecasts up to 1960.

A brochure was published on *Good and Bad School Plants* showing contrasting school facilities in use throughout the country, and a manuscript was completed on *Planning and Designing the Multipurpose Room in Elementary Schools*. A study was started relative to functional facilities for the changing programs of secondary education.

The Office continued throughout the year to prepare and release data on school building costs and estimates of school construction and to maintain liaison with and serve as a clearinghouse among governmental and nongovernmental technical agencies, school architects, and the educational profession.

The study of the *Functional Body Measurements of School-Age Children* was continued in cooperation with the University of Michigan. A series of 55 measurements was made on a representative sample of 3,300 public-school children, from kindergarten through grade 12, in the Detroit area. From these basic measurements a total of 120 different functional measurements will be derived, which are needed for designing school furniture and equipment and for planning school buildings and facilities. The results of this study will be published in 1955.

Elementary Education

The Eighth Annual Conference on Elementary Education brought together leaders of approximately 60 lay and professional organizations to discuss action programs for meeting the problems of children of elementary school age. Completed during this year was the study *Educating Children in Grades Seven and Eight*, which describes good practices based on research findings concerning children of these ages. Begun was a study of good practices in conservation education to be initiated by personal visits to selected States and communities.

This year marked the first conference held for elementary supervisors in large city schools. The conference discussion was centered

on problems such as crowded classes, shortages of teachers, half-day sessions, and similar current difficulties.

Attention has been given to stimulating State and local groups to develop ways to encourage school attendance and to provide good school experiences for migrant children. This has been done in a number of ways. Packets of materials describing good practices have been sent periodically to key State and local groups. A bulletin was prepared jointly with the Interdepartmental Committee on Children and Youth which tells how to plan community programs for migrants. An east coast migrant project was started to develop ways of solving interstate problems related to the welfare of migrants. A conference of representatives from 10 East Coast States was held to develop plans for carrying on this pilot project.

Staff members gave much time to the planning of itineraries for international visitors. In addition to the more than 100 persons in groups at the beginning of the school year, groups of approximately 14 persons from Thailand and 25 persons from Viet-Nam were each given several days' time. There was also increasing demand for recommendation of persons to go on assignment to missions abroad, to evaluate the qualifications of those who were going, to meet and advise persons about to leave on such missions, and to provide service to them through correspondence once they had arrived at their destination.

Secondary Education

Completed during the year was *A Look Ahead in Secondary Education*, the report of the Second Commission on Life Adjustment Education for Youth. It reviewed efforts of States to provide education for all American youth with particular attention given to organizational procedures, publications, and studies of school holding power. Unsolved problems which stand in the way of universal secondary education were described and suggestions were made for future experimentation. Another publication, *Teaching Rapid and Slow Learners in High Schools*, reported adaptations made in a sample of 800 large high schools to provide different teaching methods for fast- and slow-learning pupils. A third publication, *Factors Affecting the Improvement of Secondary Education*, is a report of a roundtable discussion dealing with the important experiments and investigations carried on in secondary education from 1920-50.

Published during the year were numerous publications useful to teachers, for example, *Free and Inexpensive Aids for the Teaching of Mathematics*; *Resources for Teaching English*; *Selected References on the Supervision of Instruction*; *Advantages and Disadvantages of Junior High Schools*; *Materials Helpful in Character Education*;

Core Curriculum References; and Undergraduate and Graduate Professional Preparation in Health Education, Physical Education, and Recreation.

The Education of Exceptional Children

Progress on the nationwide study, "Qualification and Preparation of Teachers of Exceptional Children," resulted in preparation for publication of *State Certification Standards for Teachers of Exceptional Children* and *College and University Programs for the Preparation of Teachers of Exceptional Children*.

Visual Education

Systematic cataloging continued of information about the motion pictures and filmstrips of all Government agencies which are available for public use in the United States. By June 30, 1954, descriptive copy had been prepared on 4,228 such firms for 3- x 5-inch catalog cards being printed and issued by the Library of Congress. A special catalog of Government films cleared for television use was compiled and published in January 1954 and a directory of loan and rental sources of Government films was issued in the spring of 1954. Work was started during the latter part of the year on the preparation of an omnibus catalog of all Government films containing an exhaustive subject index and instructions for borrowing, renting, and buying each film. This catalog, to supersede the 1951 Office catalog, *3434 Government Films*, will describe some 5,000 motion pictures and filmstrips. Publication is scheduled for 1955.

The Visual Education Service also continued to serve as the primary point for the release of Government films for educational use and to administer the overall GSA Government contract covering the sale of copies of such films. At the end of the year, 2,925 films of 22 different agencies were being sold under the GSA contract, an increase of 175 over the total a year ago.

In cooperation with the audiovisual directors in State and Territorial departments of education, a study was started of the functions, organization, and services of these departments in the area of audio-visual education. The survey findings will be published in 1955.

Libraries

Completed for publication as part of the *Biennial Survey of Education in the United States, 1950-52*, was the report of the nationwide statistical survey of libraries in over 1,800 institutions of higher education for the academic year 1951-52. This project yielded data on library resources, use, personnel, and expenditures for the use of executives and governing boards of higher educational institutions,

librarians and students of librarianship, publishers, and others concerned with library administration and development.

Manuscript was prepared on education for library service to be included in the forthcoming bulletin, *Professional Education in the United States*, to be issued by the Division of Higher Education. This provides a review of the current nationwide pattern of professional education for librarianship, including curriculums offered, admission and degree requirements, and opportunities for graduate study. A bulletin, *School Library Standards, 1954*, summarizes, by State, the current standards or requirements for the training of school librarians, for budgets, for books and periodicals, for library quarters, and other pertinent items.

HIGHER EDUCATION

Major Consultative Services

The Office made its annual inspection of Howard University dealing especially with the college of liberal arts and with general university administration. Also, with the assistance of outside specialists in higher education, the Office conducted a survey of higher education in Arizona, dealing with all the State institutions of higher education. This study was conducted under the auspices of the Board of Regents of the University and State Colleges of Arizona.

Conferences

A special conference was held on "Federal Policy With Respect to the Granting of Academic Degrees by Federally Sponsored Institutions." This Conference of 15 consultants, broadly representing educational administration, industrial training programs, and the scholarly areas of direct interest to Federal agencies, resulted in the preparation of recommendations for a general governmental policy with respect to the granting of academic degrees by Government-supported and operated institutions.

A second conference, attended by 24 persons who represented non-governmental groups interested in the accreditation of higher education institutions and the relationship of the Office of Education to this process, asked the Office to make two studies: (1) A study of the use made by State approval agencies of the Commissioner's list of "nationally recognized accrediting agencies and associations"; and (2) a comprehensive study of the status, practices, and procedures of accreditation of institutions of higher education, this to be done in cooperation with interested groups.

College Housing Loan Advisory Program

The college housing program is administered by the Housing and Home Finance Agency, and by formal agreement the Office of Educa-

tion advises on all educational phases of the program. Under the program colleges and universities submitted new applications during the year in the amount of \$74 million. About \$13 million in college housing bonds were purchased by private investment houses during 1954. Of the \$300 million authorized for the program, \$150 million was released for loans through 1954. Applications are on file for funds in excess of \$350 million.

Publications

(1) *Higher Education*, published monthly, September through May, which reaches a high percentage of the people in the colleges and universities, educational associations, and State departments who determine higher education policies. Copies also reach ministries of education and colleges and universities in other countries.

(2) *Educational Directory: Higher Education*, which listed 1,851 institutions of higher education, their principal officers, and provided information on the accreditation status, control, and enrollment of each institution.

(3) *Engineering Enrollments and Degrees, 1953*, which gave the 1953 fall enrollments in this field and the number of degrees conferred during the year ended June 30, 1953. The data are reported by institution, educational level, and branch of engineering.

(4) A series of bulletins under the general title of *General and Liberal Educational Content of Professional Curricula* was initiated. Two of these bulletins were published, *Pharmacy* and *Engineering*. A third on *Forestry* was submitted for publication. Also published was a bulletin titled *Cooperative Education in the United States*.

(5) A series of articles on education for the professions previously published in *Higher Education* and additional new articles have been put into book form and will be published under the title, *Education for the Professions*.

(6) Two additional studies which have been published include one on the 3-2 plan of engineering education and a study of the organized efforts to improve the supply and utilization of specialized manpower.

Studies in progress during the year include one on the costs students incur in attending college. This study involved 16,000 students in 103 institutions. Another study is on the causes of the withdrawal of students from programs of instruction they undertook. This study involves 13,500 students who entered the freshman class in the fall of 1950 at 161 colleges and universities. A study of the nature and extent of educational programs of less than bachelor's-degree length will be completed during the fiscal year 1955.

VOCATIONAL EDUCATION

Improvement of supervision of vocational instruction was emphasized in agricultural and home economics education. In the trade and industrial education programs special attention was given to the problems of providing related and supplemental vocational instruction to apprentices and the use of representative advisory committees.

In distributive education the preparation of master plans of State program development was a principal activity.

In home economics, assistance was given to a group of States studying the success and failure characteristics of home economics teachers and their attitudes towards children.

Significant publications include:

1. *Three-Dimensional Teaching Aids for Trade and Industrial Instruction.*
2. *Guiding High School Students of Vocational Agriculture in Developing Farming Programs.*
3. *Homemaking Education in Secondary Schools in the United States.*

INTERNATIONAL EDUCATION

During the past year 400 teachers were brought to this country for training and observation of American schools. These trainees visited over 8,000 schools, made 12,000 speeches about their countries, visited in 10,000 American homes, and met or talked with over a million United States citizens.

Arrangements were made for the interchange of 150 American teachers with an equal number of elementary and secondary school teachers from Austria, Australia, Belgium, Canada, France, Germany, Norway, and the United Kingdom. Another 121 American teachers were selected to teach in various other countries.

Technical training programs were administered for approximately 550 trainees sponsored by the Foreign Operations Administration. These included four high-level French teams, Directors General in Education from Cambodia, Haiti, and Thailand, as well as numerous provincial superintendents and directors. More than 100 colleges and universities cooperated as primary training centers.

The Office prepared itineraries and programs for 145 leaders from 47 countries. These included college presidents, professors, representatives of ministries of education, staff members of the West German Parliament, and specialists in a great variety of educational fields.

On July 1, 1954, the Department of State transferred the responsibility for the leader program to the American Council on Education.

Since these various exchange and training programs began, the

Office has arranged teaching assignments or training programs for almost 8,000 foreign educators from 60 countries.

The Office of Education was represented during the year in the delegations to meetings of five international groups: (1) The Public Education Conference of the International Bureau of Education and UNESCO; (2) the meeting of the Technical Committee of ILO on Salaried Workers; (3) the conference called by UNESCO to draft plans for an experimental project on teaching about the U. N. and Specialized Agencies; (4) the Caribbean Commission's meeting of a special committee on education and small-scale farming, and of the Commission's Research Council; and (5) the Second International Study Conference on the Atlantic Community of the North Atlantic Treaty Organization. In connection with participation in these conferences the Office of Education proposed reports of United States position or practice in the areas discussed.

A publication, *Education in Pakistan*, was added to the series of basic studies of education in other countries. This study is based on data gathered in Pakistan in 1952 and supplemented through documentation.

Assistance was given to colleges and universities through the evaluation of credentials of 2,472 students from 96 countries; service was supplied the Veterans Administration in the review of the level of instruction of 166 foreign institutions applying for approval to train veterans under Public Law 550.

Approximately 1,100 textbooks and 350 curriculum materials were added to the Educational Materials Laboratory. This laboratory in addition to serving teachers in this country has special use and significance to the teachers who come to the United States from other countries.

The Office of Education Committee on Foreign Language Teaching assisted in many projects concerned with foreign language instruction in United States schools and with the teaching of English abroad. Examples of such assistance are: (1) participation in a seminar on language and culture sponsored by the Modern Language Association of America, and (2) orientation of exchange teachers of foreign languages from abroad.

Approximately 100 persons were recruited and nominated to the FOA for educational positions in technical assistance programs overseas. Thirty-three countries in Latin America, the Near East, Europe, Africa, and Far Eastern and Southern Asia are cooperating in such programs and make requests for specialists.

During the year FOA delegated to the Office of Education the responsibility for recruitment and professional and technical support of staff for the Latin American area.

ASSISTANCE TO SCHOOLS IN FEDERALLY AFFECTED AREAS

During 1954 new legislation (title III of Public Law 815) permitted school districts to claim assistance in constructing school buildings needed to house increases in Federal pupils occurring between June 30, 1952, and June 30, 1954. Legislation also provided school construction aid to needy school districts overburdened by Federal activity because of large numbers of pupils residing on Federal property, primarily Indian reservations. A total of \$140 million was approved by the Congress in fiscal years 1954 and 1955 to finance the Federal share of projects approved under these two new titles.

A supplemental appropriation of \$55 million was also enacted during the fiscal year 1954 to be prorated among districts which had remaining unpaid entitlements under the previous legislation.

More than 2,500 local districts and 21 federally operated on-base projects were determined to be eligible for approximately \$72 million in Federal funds. This amount was paid on behalf of about 920,000 pupils reported as federally connected. These pupils represent almost one-fifth of the enrollment in the schools which they attend; and the schools which they attend enroll about one-fifth of all public-school children in the Nation.³

RESEARCH AND STATISTICAL SERVICES

The Research and Statistical Standards Section carries major responsibility for the basic statistical reports from the Office of Education in the fields of elementary, secondary, and higher education. The Section is also responsible for special statistical studies and reports on current educational problems, and for providing statistical information to a wide variety of persons and groups, including congressional committees, officials of Federal and State agencies, foreign ministries of education, educational and other organizations, professional societies, newspapers and magazines, and the general public. In addition, the Research and Statistical Services Section provides consultative and advisory services in the area of research methodology and statistics to other Divisions of the Office and to other governmental agencies (such as the National Science Foundation); it provides technical statistical services to other Divisions of the Office; and it serves in a liaison capacity between the Office of Education and other Federal statistical agencies. Following are some publications from the Research and Statistical Standards Section during the fiscal year: *Statistics of Public Secondary Day Schools, 1951-52; Fall Enrollment in Higher Educational Institutions, 1953; Earned Degrees Conferred*

³For a more detailed discussion of the operations of this program under Public Laws 815 and 874 (81st Cong.), as amended and extended by Public Laws 246, 248, 731, and 732 (83d Cong.), see Fourth Annual Report of the Commissioner of Education concerning the administration of Public Laws 874 and 815.

by Higher Educational Institutions, 1952-53; Current Expenditures per Pupil in Public School Systems in Large Cities, 1952-53; and in Small- and Medium-Sized Cities, 1952-53; Engineering Enrollments and Degrees, 1953 (with the Division of Higher Education); and Statistics of Special Education for Exceptional Children, 1952-53 (with the Division of State and Local School Systems).

Table 1.—Grants to States: Office of Education, fiscal year 1954¹

States, Territories, and possessions	Total	Colleges for agriculture and the mechanic arts	Cooperative vocational education	Survey and school construction	Maintenance and operation of schools
Total.....	\$205,761,959	\$5,051,500	\$25,321,340	\$105,265,046	\$70,124,073
Alabama.....	6,354,596	100,541	670,987	4,577,918	1,005,150
Arizona.....	5,060,963	77,477	170,153	4,222,208	591,125
Arkansas.....	3,514,814	89,048	491,997	2,299,703	634,066
California.....	30,084,059	175,599	1,222,094	15,536,857	13,149,509
Colorado.....	4,672,223	83,218	217,420	2,752,129	1,619,456
Connecticut.....	1,925,482	90,023	255,287	371,819	1,208,353
Delaware.....	261,724	73,173	158,654	18,042	11,855
Florida.....	4,598,548	97,644	393,203	2,711,288	1,396,413
Georgia.....	8,872,654	104,360	720,644	5,435,386	2,612,264
Idaho.....	1,721,424	75,872	168,583	1,001,360	475,609
Illinois.....	4,170,345	156,906	1,098,786	1,444,264	1,470,389
Indiana.....	2,998,934	109,245	655,604	1,255,800	978,285
Iowa.....	1,607,379	96,146	555,178	662,687	293,368
Kansas.....	5,498,760	89,006	366,810	2,371,701	2,671,243
Kentucky.....	3,765,948	99,375	680,790	1,422,670	1,563,113
Louisiana.....	1,997,677	96,769	491,851	964,454	444,603
Maine.....	1,057,787	79,115	154,934	393,469	430,269
Maryland.....	8,590,237	93,372	282,568	6,552,684	1,661,613
Massachusetts.....	1,349,269	116,789	499,933	58,864	673,683
Michigan.....	5,528,305	133,559	889,109	2,930,350	1,575,287
Minnesota.....	1,224,943	99,751	571,955	420,915	132,322
Mississippi.....	2,551,600	91,735	614,315	1,322,185	523,365
Missouri.....	3,360,287	109,448	695,773	1,615,407	939,659
Montana.....	1,069,841	75,895	154,625	636,604	202,717
Nebraska.....	1,867,190	83,222	287,991	689,774	806,203
Nevada.....	1,664,385	71,597	132,435	764,977	695,376
New Hampshire.....	568,296	75,319	153,503	-----	339,474
New Jersey.....	2,530,481	118,233	500,499	927,027	984,722
New Mexico.....	5,003,917	76,795	167,431	3,697,805	1,061,886
New York.....	6,257,332	217,934	1,561,705	2,462,955	2,014,738
North Carolina.....	4,144,454	110,518	985,134	1,949,731	1,126,071
North Dakota.....	511,483	76,181	202,404	84,698	148,200
Ohio.....	7,298,688	149,269	1,109,584	3,325,643	2,714,192
Oklahoma.....	5,290,873	92,278	438,879	2,075,596	2,684,120
Oregon.....	894,549	85,176	263,375	274,547	271,451
Pennsylvania.....	3,450,529	174,720	1,242,328	1,012,091	1,021,390
Rhode Island.....	918,390	77,899	111,959	165,112	563,420
South Carolina.....	3,299,902	91,118	492,257	1,663,090	1,053,437
South Dakota.....	983,059	76,511	201,546	173,338	531,664
Tennessee.....	2,802,786	102,835	715,420	1,438,657	545,874
Texas.....	11,572,124	146,921	1,248,752	5,446,642	4,729,809
Utah.....	2,753,794	76,872	165,983	1,800,535	710,404
Vermont.....	331,685	73,768	158,258	45,199	54,460
Virginia.....	15,150,157	103,104	643,318	9,078,078	5,325,657
West Virginia.....	544,963	90,006	414,354	6,615	33,988
Washington.....	8,522,481	93,731	362,316	4,826,126	3,240,308
Wisconsin.....	1,150,359	104,260	615,079	120,338	310,682
Wyoming.....	1,257,060	72,898	158,654	901,146	124,362
Alaska.....	1,453,362	71,283	64,327	-----	1,317,752
District of Columbia.....	96,162	-----	96,162	-----	-----
Hawaii.....	2,550,991	74,986	158,654	1,356,562	960,789
Puerto Rico.....	1,019,717	50,000	479,789	-----	489,928
Virgin Islands.....	34,991	-----	34,991	-----	-----

¹ On a checks-issued basis. Does not necessarily agree with allotments or expenditures for a given fiscal year.

² Does not include \$4,950,000 paid to Housing and Home Finance.

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Office of Education

DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

JAN 24 1957

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EDUCATION COLLECTION

A REPORT of the work of the Office of Education is, in some respects, a report of the problems and achievements of American education. It is not surprising, therefore, that a report of Office activities in the fiscal year 1955 should reflect some of the awakened concern of the American public in matters pertaining to education. As citizens generally have turned their attention to the pressing educational problems confronting them, the Office of Education also has been mobilizing itself to provide greater assistance and leadership in the task of providing the Nation with an educational system equal to its growing needs. Chief among the activities of the Office designed to this end were the reorganization of the Office itself, and the launching of the White House Conference on Education.

REORGANIZATION

The primary obligation of the Office is to provide leadership and services that will aid the educational profession and the public in providing essential education for the Nation. In order that the resources of the Office could be mobilized more effectively, the staff activities were reorganized during the past year under three broad areas: (1) Research, (2) Services, and (3) Grants.

The research coordinator is responsible for the collecting and processing of statistical data on the status and trends of elementary, secondary, and higher education, and for special research studies, including those under the Cooperative Research Program authorized under Public Law 531 of the 83d Congress. The latter permits the Office for the first time to enter into contracts with colleges, universities, and State educational agencies for the conduct of research, surveys, and demonstrations in the field of education.

The services coordinator has responsibility for relating services of International Education, State and Local School Systems, Vocational Education, and Higher Education.

The grants coordinator at present supervises grants appropriated by Congress for construction, maintenance, and operation of schools in federally affected areas.

It is expected that this overall reorganization of the Office about these three major areas will greatly increase the effectiveness of its assistance to educators and the public.

WHITE HOUSE CONFERENCE

On July 26, 1954, President Eisenhower signed P. L. 530 which provided for the establishment of the White House Conference on Education. The Office of Education has been privileged to assist the Presidential Committee and the staff of the White House Conference in inaugurating this historic effort, which culminated with the national conference on November 28-December 1, 1955.

The Presidential Committee for the White House Conference met for the first time on December 2, 1954, holding four additional meetings during the fiscal year. The Committee, consistent with the expressions of the President and the intent of Congress, defined its responsibilities in the following terms: (1) to assist, when invited, in planning conferences in the States and Territories; (2) to organize a White House Conference on Education; and (3) to make a report to the President on the "significant and pressing problems in the field of education." It was agreed that the program of the Committee would be directed at the following purposes:

1. Bringing about a more widespread knowledge and appreciation of, and interest in, education.
2. Helping to create a continuing concern on the part of great numbers of citizens to face their responsibilities toward education.
3. Serving to bring about an analysis of the current condition of our educational system.
4. Providing examples of solution to educational problems and inspiration for an accelerated effort in planning more action programs of school improvement.
5. Providing the basis for a report to the President of the significant and pressing problems in the field of education and making recommendations, insofar as possible, for their solution.

The Committee decided that the scope of the White House Conference program should be limited to consideration of the problems of elementary and secondary education, but that these problems should be considered in the light of our total system of education. With these purposes clearly set forth, the Committee's program developed

rapidly. Throughout the Nation attention was directed toward developing answers to six questions which would form the agenda for the White House Conference.

1. What should our schools accomplish?
2. In what ways can we organize our school systems more efficiently and economically?
3. What are our school building needs?
4. How can we get enough good teachers—and keep them?
5. How can we finance our schools—build and operate them?
6. How can we obtain a continuing public interest in education?

It was felt that the Committee, as a part of its reporting function, had an obligation to develop its own facts and conclusions regarding the six key questions.

Six subcommittees were formed, each assisted by highly qualified educational consultants, to make independent studies of these questions and to prepare helpful discussion materials for distribution to the persons who would participate in the White House Conference.

The central purpose of citizen conferences was to bring about a greatly increased awareness of educational problems on the part of a broad cross section of the American people—the kind of awareness which would result in continuing astute and determined citizen action on every level of government.

To this end, the Committee worked closely with 24 national organizations broadly representative of the American people and of the education profession. In addition, several hundred smaller organizations were contacted to interest them in the program. National organizations, through their publications and by direct contact with State and local affiliates, were instrumental in informing the Nation of the nature of the program and enlisting the active interest and participation of as many citizens as possible.

Every State in the Union, the Territories of Alaska, Hawaii, Puerto Rico, and the Virgin Islands, and the District of Columbia made plans to participate in the program. During the past year, all 52 States and Territories and the District of Columbia voluntarily held conferences on education prior to the White House Conference. Some of the States which held early conferences scheduled a second one prior to the White House Conference. During the year 29 States went beyond holding a single State conference and conducted community, county, and regional conferences as a part of their State programs.

While the accomplishments of the President's White House Conference on Education are properly within the scope of the fiscal 1956 report, it is not too early to report that, in terms of citizen interest and enthusiasm, this Conference is a milestone in American educational history.

INCREASED ENROLLMENTS AND RELATED PROBLEMS

In the past few years much concern has been voiced over the increased enrollments in the schools and the problems created by this increase. The total school enrollment at all levels, in both public and nonpublic schools, has been estimated at 38,113,500 for the 1954-55 school year, an increase of almost 2 million over the previous year. These pupils represent 23 percent of the estimated total population of 162,187,000 on June 1, 1954. It is estimated that by 1959-60 the total school enrollment at all levels will reach 46 million.

The estimated increase of 1,692,000 pupils in elementary and secondary enrollments in 1954-55 over 1953-54 is the largest single year increase recorded. The 1,473,000 increase in elementary pupils is 5.6 percent above last year, and the 219,000 increase in secondary pupils is 3.0 percent above last year. Enrollment in institutions of higher education increased 12.1 percent during this period.

School enrollments in the continental United States, 1953-54 and 1954-55¹

	<i>1954-55</i>	<i>1953-54</i>
Elementary schools (including kindergartens) :		
Public-----	24,091,500	22,801,400
Private and parochial-----	3,506,200	3,325,400
Residential schools for exceptional children ² -----	65,000	65,000
Model and practice schools in teacher-training institutions-----	38,300	37,900
Federal schools for Indians-----	27,400	27,500
Federal schools under Public Law 874-----	9,600	7,800
Total elementary-----	27,738,000	26,265,000
Secondary schools:		
Public-----	6,582,300	6,388,000
Private and parochial-----	774,800	751,200
Residential schools for exceptional children ² -----	11,100	11,100
Model and practice schools in teacher-training institutions and preparatory departments of colleges-----	40,500	40,000
Federal schools for Indians-----	12,300	11,800
Federal schools under Public Law 874-----	1,000	900
Total secondary-----	7,422,000	7,203,000
Higher education:		
Universities, colleges, professional schools, including junior colleges and normal schools-----	2,740,000	2,444,000
Other schools:		
Private commercial schools-----	144,000	131,000
Nurse training schools (not affiliated with colleges and universities)-----	69,500	71,900
Total other schools-----	213,500	202,900
Grand total-----	38,113,500	36,114,900

¹ Office of Education estimates.

² In addition to those provided for in day schools.

Approximately 60,000 public elementary and secondary classrooms and related facilities were constructed in the United States during the 1954-55 school year. It is estimated that the capital outlay investment for these facilities was in excess of \$2 billion. In spite of this all-time high in school construction, the country still faces a large school building program because of increasing enrollments, population mobility, school district reorganization, and wide demands for an extended and enriched program of education and community services.

The nationwide School Facilities Survey conducted by the Office of Education revealed that States have projected their plans for meeting school plant needs to the extent of 476,000 classrooms during a period of five school years (1954-55 to 1958-59, inclusive), at an estimated aggregate capital outlay cost of more than \$16 billion, exclusive of planned rehabilitation.

The primary source of school construction funds has been school district bonds supported by local property taxes. There are trends, however, toward school district reorganization and State aid for capital outlay which will broaden the fiscal base and improve methods of financing school construction.

Planning school plants is becoming more and more a cooperative procedure. School architects, administrators, supervisors, teachers, pupils, furniture manufacturers, and lay citizens cooperate in planning school facilities. School buildings and equipment are thus becoming more functional and better adapted to educational requirements.

Specialists in curriculum, school buildings, and furniture and equipment, in Federal and State governments and in colleges and universities, are assisting local school officials and architects in the initial planning for the space required for different courses and learning activities, the equipment needed for effective instruction, proper lighting for a variety of seeing tasks, and suitable heating, ventilating, sanitation, and sound control. Final decisions on these matters, however, are made by local school officials, subject to State regulations.

School programs today include a variety of learning situations which entail many activities and instructional materials. Such programs demand classrooms designed for multiple purposes. The trend in elementary school planning is toward a self-contained classroom of 900 or more square feet with work counter, sink, toilet, storage compartments, chalk and tack boards, display cases, and movable furniture and equipment. Such rooms are readily adapted to accommodate a variety of activities. Secondary school plants are usually designed with special classrooms for science, art, music, homemaking, business education, crafts, and various types of vocational and prevocational shops. The trend in secondary school planning, however, is toward

some multi-use classrooms which will serve more than one specialized subject area.

The shortage of teachers continued during 1954-55, and elementary and secondary schools will need a total of 229,700 new teachers when the schools open this fall. These teachers will be required (1) to replace 91,200 emergency teachers; (2) to replace 83,300 qualified teachers who will leave the profession; and (3) to provide the 55,200 teachers needed for the increase in enrollment. It is estimated that 25,000 of the emergency teachers will become qualified by the time school opens. In addition, 95,186 teachers completed certification requirements in 1955, but only 63,400 of these are expected to accept teaching positions. With only 88,400 new qualified teachers entering the profession, there will be a deficit of 141,300 teachers when schools open in the fall. The 141,300 shortage will have to be made up by more emergency teachers, by teachers returning to the profession who did not teach during the last year, and by more overcrowding. The figures given above do not include any teachers to reduce present overcrowding nor to enrich the curriculum.

The annual estimates submitted to the National Education Association by the State departments of education showed an average annual salary per member of instructional staff in 1954-55 of \$3,932. The average elementary school classroom teacher's salary was \$3,615; among secondary school teachers the average was \$4,194.

Supply and demand for elementary and secondary public and nonpublic school teachers, 1955-56

<i>Item</i>	<i>Elementary and secondary</i>
Supply:	
Total teachers, 1954-55 ¹ -----	1,201,800
Less emergency teachers, 1954-55-----	91,200
Total qualified teachers, 1954-55-----	1,110,600
Less 7.5 percent turnover-----	83,300
Qualified teachers returning for 1955-56-----	1,027,300
Emergency teachers qualifying for 1955-56-----	25,000
New supply of qualified teachers (79 percent of elementary and 56 percent of high school teachers trained in 1954-55)-----	63,400
Total qualified supply, 1955-56-----	1,115,700
 Demand:	
Total teachers, 1954-55-----	1,201,800
Teachers needed to meet increase in enrollment in 1955-56 ¹ -----	55,200
Total demand, 1955-56-----	1,257,000
Shortage of qualified supply-----	141,300

¹ See footnote 1, on following page.

JUNIOR HIGH SCHOOL

During fiscal 1955 the staff of the Office of Education gave considerable attention to the reorganization of secondary education and problems associated with the junior high school. Studies indicate that the reorganization of schools to include some form of junior high school has gone forward rapidly in recent years, especially since 1946.

The number of seventh- and eighth-grade pupils enrolled in the secondary schools rose almost continuously from 142,000 in 1920 to 1,993,000 in 1952. During the same period, enrollments in these grades in the 8-4 schools fell from 2,778,000 to 2,025,000. This drop is due chiefly to the shifting of these grades to the new junior high school forms of organization.

In 1920 there were less than 5 percent of the seventh- and eighth-grade pupils in the reorganized schools; by 1952 this proportion had risen to almost half (49.6 percent) of the total. The rapid increase in total secondary school enrollments coupled with the reorganization of secondary schools has necessitated the construction of many new school facilities.

These developments have caused some educators to raise questions concerning the junior high school as a unit in secondary education. Has the junior high school been set up because of expedient administrative and building considerations, or is it the best organization to provide general education for early adolescents 12-15 years of age? Does it clearly demonstrate superiority over the traditional 8-4 plan? Have its purposes changed so much since its origin in 1909 as to suggest that the junior high school needs a new redirection? These questions have stimulated a surge of professional interest in the junior high school.

Because of the wide and growing interest in the junior high school, the critical demands for more buildings for youth of this age group, and the unavailability of recent data the office staff sponsored a National Conference on Junior High Schools. An analysis was also made of State department of education policies and regulations affecting the junior high school. As a result of these activities several national professional organizations and State departments of education are now making studies of this important segment of secondary education.

¹ The number of elementary and secondary school teachers in *public* schools, in the fall of 1954, was 1,065,803 (Office of Education Circular No. 417 Revised). To this must be added the number in nonpublic schools (private and parochial), in model and practice schools of colleges and universities, in residential schools for exceptional children, and in schools operated under Federal auspices. The number of teachers in this group of schools was estimated as 136,000, on the basis of 1 teacher to every 33 pupils—the ratio prevailing in the Roman Catholic schools which enroll 88 percent of the pupils in this group.

EDUCATIONAL TV

At the beginning of fiscal 1955, there were 7 non-commercial educational television stations in operation. During the year, 1 of the 7 suspended operation pending reorganization, and 9 new stations went on the air, bringing the total of the educational television stations to 15. At the close of fiscal 1955, 11 additional stations were actually under construction, 16 more had already received their construction permits from the Federal Communications Commission, and applications for 13 more had been filed.

A look at the 15 educational TV stations in operation at the end of fiscal 1955 reveals 5 distinct types of licenses. Six of the 15 are owned and operated by State universities. Four stations are owned and operated by non-profit educational television corporations formed specifically to serve educational and cultural needs of all elements of the population of the local metropolitan areas. Three of the stations are owned and operated by State educational broadcast councils financed from State appropriations. One station, KUHT of Houston, is owned and operated by a city university, the University of Houston. One station, WGBH-TV of Boston, is owned and operated by the Lowell Foundation, an endowed foundation serving educational and cultural needs of the Boston metropolitan area.

On the whole, educational television station development, already involving an expenditure of more than \$10 million for equipment alone, is showing a decidedly healthy growth. Now that educational station planners no longer feel themselves under compulsion to get their stations on the air immediately, lest locally reserved educational television channels be re-assigned for commercial use, more attention is being given to planning educational program services, and to developing sound bases for financing station operating and programing costs. In fact, the trend today seems to be to select and train the production staff first, starting actual production over closed circuit facilities on an experimental basis while funds for station construction and operation are being raised.

The growth of educational television development seems in no way to have dimmed the interest of schools and colleges in radio broadcasting. In the year just ended, some 30 new educational FM stations have gone on the air, bringing the total of non-commercial educational radio stations in operation to 160.

EXCEPTIONAL CHILDREN

During the year, the Office of Education continued to give leadership to the nationwide study on the Qualification and Preparation of Teachers of Exceptional Children. A study was made of the distinctive competencies needed by teachers of the blind, crippled, deaf, gifted, hard-of-hearing, mentally retarded, partially seeing, special

health cases, socially maladjusted, and speech-handicapped. Included also was an evaluation of the competencies needed by special education personnel in colleges and universities, and in administrative positions in State and local school systems.

Four publications have now come from the study and others are nearing completion. The results of the study were presented at various National, State, and regional meetings throughout the year. It is anticipated that the findings will form the basis for improved programs for exceptional children through the development of better in-service and pre-service preparation of teachers.

CIVIL DEFENSE EDUCATION

A delegation of authority by the Federal Civil Defense Administration to the Department of Health, Education, and Welfare gave the Office of Education the responsibility for planning, developing, and distributing materials which will assist schools in teaching civil defense skills, knowledge, and fundamentals of behavior during emergencies. Contractual agreements were made with State departments of education in Connecticut, Michigan, and California to establish pilot centers for the development of civil defense instruction materials for teachers in various subject areas and at all levels. The Office of Education aided the State pilot center staffs by reviewing and evaluating technical reports developed by the Federal Civil Defense Administration and other government and non-government agencies.

ASSISTANCE TO SCHOOLS IN FEDERALLY AFFECTED AREAS¹

A major activity of the Office during the 1955 fiscal year was administration of the grant programs authorized for those school districts which have experienced a severe financial burden as a result of activities of the United States. The fiscal year 1955 was the fifth year these programs, authorized by Public Laws 815 and 874 of the 81st Congress, had been in operation. Public Law 815 authorizes financial assistance for construction of school facilities needed to house increased school enrollments resulting from new or expanded Federal activities, mostly military installations. Public Law 874, the companion law, provides Federal assistance for current operating expenses each year to take the place of local revenues lost primarily because of the nontaxable status of federally owned land on which the school children live or on which their parents work.

Passage of these two Acts in September 1950 marked the first attempt by the Congress to establish a uniform policy governing the allocation of financial assistance to school districts seriously affected by Federal

¹ For a more detailed discussion of the operations of this program under Public Laws 815 and 974 (81st Cong.), as amended, see Fifth Annual Report of the Commissioner of Education concerning the administration of Public Laws 874 and 815.

activities and to place the administration of this program in one administrative agency. The Laws also attempted to establish an objective method of determining the extent of the Federal financial burden and the amount of Federal assistance to which each district was entitled. Accordingly, each Act established specific requirements for eligibility, defined the categories of Federal impact for which payment would be made, and included a formula for determining the amount of assistance. In addition to grants to local educational agencies Public Law 815 recognized the necessity for and authorized the construction of temporary schools in certain situations and the Federal construction of schools on Federal bases where necessary in order best to serve the children. Public Law 874 recognized the necessity for and authorized the Commissioner of Education to arrange for providing free public education for children living on Federal enclaves when no State or local educational agency was responsible for or was able to provide suitable education for such children.

The original Public Law 815 provided Federal assistance for increases in school enrollment which resulted from Federal activities which occurred from the beginning of World War II in 1939 to June 30, 1952. This program was extended in August 1953 by the passage of Public Law 246 to provide for increases in school enrollment occurring from June 30, 1952, to June 30, 1954. Early in the 1955 fiscal year, Congress again extended this program by the passage of Public Law 731 to provide for school enrollment increases occurring during the period June 30, 1954, to June 30, 1956. An appropriation of \$70 million was made early in the 1955 fiscal year for allocation to projects filed by June 30, 1954, and for completion of that program. In April 1955 Congress made available an additional \$70 million for the first year of the newly authorized program. Thus, a major activity of the Office during the year has been the analysis of applications submitted for the new 2-year period, an allocation of funds to approved projects, and the completion or moving toward completion of projects already approved from prior years' appropriations.

By June 30, 1955, a total of \$585,000,000 had been appropriated for construction of school facilities in federally affected school districts. In addition, an estimated \$230,000,000 had been added to the projects from local funds. These funds were used or will be used to help build 2,700 school buildings in local districts and 134 federally constructed projects located on 83 Federal installations. It is estimated that this program will have helped provide approximately 25,000 classrooms and related school facilities which will be sufficient to house an estimated 750,000 children.

During the fiscal year, 2,831 school districts applied for assistance under Public Law 874 for maintenance and operation of school plants. Of these, 2,700 were determined to be eligible for approximately \$75

million. In addition there were 31 federally operated on-base projects under the provision of section 6 of the Act. The eligible school districts had an average daily attendance of 910,000 federally connected children on which payments were authorized and an estimated total attendance of over 5,500,000 pupils.

While Federal activities, particularly those connected with defense contracts, have stabilized throughout the country there continues to be a number of new Federal impact areas resulting primarily from new or expanded Air Force installations, reclamation project activities, and atomic energy projects. Continued construction of housing for military personnel on or near military installations also increases school enrollment in the Federal impact areas. Thus there was an increase of 177 eligible school districts in the 1955 fiscal year over 1954 and an increase of about 3 percent in the cost per pupil resulting in an increase of approximately \$10 million in the cost of the program.

Another major activity occupying the Division during the year was securing compliance with the January 1954 order of the Secretary of Defense that no school located on military installations could be operated on a segregated basis after the fall of 1955. There were 24 schools located on Federal property operated by local educational agencies on a segregated basis during the 1954-55 school year. Compliance with the order of the Secretary of Defense required ascertaining whether local educational agencies operating on-base schools could in the 1955-56 school year operate those schools on an integrated basis or whether Federal operation under section 6 of the Act would be necessary and, if so, preparing the necessary budgets and arranging for such operation.

Of the 24 schools located on Federal property 20 were federally owned schools located on military installations and operated by local educational agencies on a segregated basis during the 1955 fiscal year. Four of these have been discontinued, 8 will be operated on an integrated basis by local educational agencies in the 1956 fiscal year, and 8 will be operated by the Federal Government on an integrated basis. The remaining 4 projects are locally owned schools located on property leased by the local educational agencies from the Department of Defense. These schools will be operated on the same basis as are other schools in these districts.

VOCATIONAL EDUCATION

The Office of Education administered approximately \$31,000,000 of Federal vocational education funds appropriated for allotment to the States and Territories for the fiscal year ending June 30, 1955. This was an increase of \$5,000,000 over the previous year. The additional funds were used primarily to extend the program to communities not previously having vocational programs.

The Assistant Commissioner for Vocational Education was made an ex-officio member of the Federal Committee on Apprenticeship. The Office participated in several Federal-State apprenticeship agency joint conferences called by the U. S. Department of Labor. Closer working relationships were established in the apprenticeship program in the matter of understandings of the respective responsibilities of this Office and these agencies in the gathering of statistics and the development of programs of related instruction for apprentices conducted by public schools.

A conference of State directors of vocational education was held to consider policy matters in the administration of the total program of vocational education. Areas studied included vocational guidance, distributive education, home economics, trade and industries, and agriculture. The recommendations of the conference will be used as a basis of future considerations of policy.

The Office also held a planning conference on research in agricultural education in which recommendations made by the National Committee on Research in Agricultural Education were considered. As a result, a comprehensive study is to be made of the Young Farmer Program and a publication on the subject issued for use by vocational leaders in agricultural education.

Staff members met with representatives of producers of both natural and synthetic fibers to plan a training program in textile fibers for salespeople employed in stores, including high school students enrolled in cooperative distributive education programs.

The shortage of teachers of home economics persists although 7,693 persons were enrolled in college courses in 1954 preparing for the teaching of home economics. The shortage is due to the facts that home economics teachers marry after a few years of teaching and leave the profession, and that programs of home economics are being established in many more schools each year.

The shortage of coordinators of local cooperative programs in distributive education and persons qualified for State level positions in the program has become acute. The shortage in this field is due in part to the fact that increased Federal funds were available for 1955 following several years of decreases in Federal funds which resulted in the curtailment of teachers and coordinator training programs in some of the States.

The shortage of vocational agriculture teachers has become more acute than at any time since World War II despite the fact that 3,479 persons were being trained by the colleges as such teachers. The shortage in this field is due largely to the fact that most of the vocational agriculture teachers are trained in the land-grant colleges where they take military training and become reserve officers. After serving several years, many go into other than teaching occupations.

Increased demand for agricultural college graduates by commercial concerns and State and Federal agricultural programs also contributes to the shortage.

LAND-GRANT COLLEGE AND UNIVERSITY FUNDS

Each year the Office of Education initiates certification as to each State and Territory (1) whether it is entitled to receive its share of the annual appropriations for the land-grant colleges and universities and (2) the amounts it is entitled to receive. The certification for the year ending June 30, 1955, for the Bankhead-Jones funds (annual appropriations) amounted to \$2,501,500 and that for the Morrill-Nelson funds (permanent appropriation) amounted to \$2,550,000, a grand total of \$5,051,500.

COLLEGE HOUSING PROGRAM

The Office of Education provided advisory service to colleges and universities and the Housing and Home Finance Agency on new applications in the amount of \$70,000,000 during fiscal 1955. These loan requests are anticipated to provide residential facilities for 20,928 single students, 1,020 married students, and 323 faculty members.

The prevailing interest rate of 3.25 percent deterred many applicants from completing loan requests and financing needed residential facilities. Privately operated institutions used the program to a greater extent than publicly operated institutions because the 3.25 interest rate is still favorable to the private college or university. Publicly supported institutions tended either to delay construction or, in some favorable instances, to secure loans at interest rates slightly under the College Housing Program rate. Associations in higher education continued to request lower interest rates, preferably under 3 percent, and a release of all remaining funds for immediate use.

Private investors continued to participate in the program. During Fiscal 1955, individuals and syndicates are reported to have purchased approximately \$8,000,000 in college housing revenue bonds when opened to competitive bids under the College Housing Program. A few 40-year issues were sold to private investors, but the usual pattern was that only the earlier issues were purchased by private investors.

ADULT EDUCATION

During the year the Office of Education gave recognition to the rapidly growing movement of adult education by creating an Adult Education Section. Its purposes are to: (a) provide consultative services to State and local school officials, teacher-education institutions, professional and lay organizations, and Federal agencies on needs in and problems of adult education; (b) conduct and publish

studies in the field of general adult education, including the education of the aging and aged; (c) participate in conferences and workshops on the various phases of adult education; and (d) establish and maintain cooperative relationships with professional and lay organizations and voluntary agencies interested in the field.

INTERGROUP EDUCATION

The Office of Education cooperated actively with the National Education Association and the American Teachers Association in developing a packet of materials and a leader's guide on intergroup education for leaders of adult community groups. The purpose of the packet and leader's guide is to provide an overall orientation to the several aspects of the problems involved in achieving improved human relations. While the packet is concerned with the general subject of intergroup relations, it will be found useful to persons interested in the implementation of the Supreme Court's opinion on school segregation.

INTERNATIONAL EDUCATION

Education has an increasingly important role in international affairs. First, it is one of the best ways to help people to become acquainted with each other. Various cultural programs designed to promote understanding seem to grow in scope and effectiveness with each passing year. Secondly, education is a necessity for people who are learning new technical skills needed to improve their standard of living. Technical assistance to people less advanced mechanically than ourselves is an increasingly important component of our foreign policy, and is in fact a program of education.

Substantial funds of the United States and other governments are supporting international educational programs, both on the country-to-country and on the United Nations basis. Private organizations also are investing large sums in educational enterprises designed to increase international understanding, and to improve economic conditions.

The Office of Education has a growing part in supporting many of these programs, although it has direct operating responsibility for only a small part of the Federal investment in international education. The Office serves as adviser and agent for a number of Federal international activities, and also is frequently asked to provide advisory services to numerous private organizations and individuals.

One evidence of the growing importance of education in relations between nations is in the agendas of international conferences. The Office has an increasingly important responsibility in advising the Department of State concerning important educational issues, and

in preparing position papers for the guidance of American delegates to a variety of international conferences.

The new role of the United States in international affairs is reflected in schools and universities by the need for new courses, the revision of existing courses, and in a variety of research programs. Lay groups and organizations are carrying on related activities.

The Office is asked advice concerning curriculum development for children in elementary schools of the United States to help them become acquainted with the peoples and cultures of other countries. Secondary schools are experimenting with programs designed to stimulate in young people an interest in, and a better understanding of, current affairs. Teaching about the United Nations and its specialized agencies is another approach to international understanding. School systems, State departments of education, private publishing companies, and Government agencies are publishing bulletins, yearbooks, and articles to assist schools in developing programs of international understanding. The Office serves a useful function in helping educators to avoid propaganda, and to develop a sound approach to international education which is in harmony with our national interest.

Both Government and business are turning to the universities for specialists in international affairs. Institutions of higher education are providing more area programs, more facilities for overseas research, and improved collections of source materials and training for scholars specializing in international relations.

Exchange of persons programs sponsored by the United States Government and by private organizations are bringing thousands of students and educators from other countries to the United States, and have greatly stimulated an interest in international education. Colleges and universities, State departments of education, thousands of schools, private educational organizations, as well as community groups and private citizens, have cooperated in providing for these visitors educational experiences and an insight into American life and culture. The opportunity to assist in this program has given countless citizens of our country an opportunity to obtain firsthand information about, and to develop a deeper understanding of, the people and lands from which these visitors came.

In cooperation with the Department of State during the year 1954-55 the Office of Education arranged exchange and one-way teaching assignments for 436 teachers and school administrators from the United States and cooperating countries. In addition, 305 visiting educators came on 6-month training grants under the Teacher Education Programs.

During the 1954-55 school year the Office of Education continued to work with the Foreign Operations Administration in the development

of technical assistance programs of education in 34 countries. One hundred thirty-four educators were recruited by the Office for appointment by the Foreign Operations Administration to serve in educational missions in these countries. Professional and technical consultation was provided by the Office, and the Foreign Operations Administration was advised on the development of university contracts for carrying out assignments in education overseas. Under this same program, 700 educators from more than 30 countries were brought to the United States for training in a wide variety of fields to promote their countries' economic, social, and educational development.

Assistance was continued to university and college registrars, State Boards of Licensure, and the U. S. Civil Service and other Federal agencies in the interpretation of credentials for study in other countries, totaling 2,900 requests. The Veterans Administration also continued to call upon the Office for recommendations regarding the level of instruction in certain courses offered by foreign schools for United States war veterans.

The Clearing House in the Office of Education, established at the request of the Department of State to maintain a file of information concerning persons entering and leaving the United States under the various Federal Government-sponsored exchange programs, including that of the Foreign Operations Administration, increased its list from 15,000 to 21,000 individuals this year. To date, some 80 different statistical studies have been prepared by the Clearing House for the Department of State.

The Office of Education, through its Educational Materials Laboratory, has provided an opportunity for visiting educators from other countries, as well as educators and laymen in the United States, to examine representative textbooks and materials used in schools in this country. In cooperation with specialists of the Office of Education, it has assisted FOA missions, the United States Information Agency, and Ministries of Education, in selecting texts and materials for use in other countries. The Laboratory also maintains a permanent exhibit of materials produced in the FOA missions and in connection with fundamental education programs around the world.

There is a substantial and growing interest among American educators in international education. The success of these programs, both governmental and private, results from the strong public support they are receiving both in this country and abroad. There is a growing belief that education is an effective means for achieving the foundation of international stability and peace.

OTHER SOURCES OF INFORMATION

U. S. Government Films for Public Educational Use. Bulletin 1955, No. 1.

State Accreditation of High Schools. Bulletin 1955, No. 5.

Statistics of Land-Grant Colleges and Universities, Year Ending June 30, 1954. Bulletin 1955, No. 8.

Summaries of Studies in Agricultural Education, Supp. No. 8. Vocational Division Bulletin No. 256.

Statistical Summary, 1951-52. Chapter 1, Biennial Survey of Education in the United States, 1950-52.

Statistics of State School Systems, 1951-52. Chapter 2, Biennial Survey of Education in the United States, 1950-52.

Statistics of City School Systems, 1951-52. Chapter 3, Biennial Survey of Education in the United States, 1950-52.

Statistics of Higher Education, 1951-52. Chapter 4, Section II, Biennial Survey of Education in the United States, 1950-52.

Federal Government and States. Part 1, Education Directory, 1954-55.

Counties and Cities. Part 2, Education Directory, 1954-55.

Higher Education. Part 3, Education Directory, 1954-55.

Education Associations. Part 4, Education Directory, 1954-55.

Resident, Extension, and Adult Education Enrollment in Institutions of Higher Education, November 1953. Circular No. 414.

Earned Degrees Conferred by Higher Education Institutions, 1953-54. Circular No. 418.

Fall Enrollment in Higher Educational Institutions, 1954. Circular No. 419.

Engineering Enrollment and Degrees, 1954. Circular No. 421.

Current Expenditures per Pupil in Public-School Systems: Large Cities, 1953-54. Circular No. 436.

Current Expenditures per Pupil in Public-School Systems: Small and Medium-Sized Cities, 1953-54. Circular No. 438.

Statistics of Public Elementary and Secondary Education of Negroes in the Southern States, 1951-52. Circular No. 444.

Salaries and Other Characteristics of Beginning Rural School Teachers, 1953-54. Circular No. 446.

Statistics of Negro Colleges and Universities, 1951-52 and Fall of 1954. Circular No. 448.

Public-School Finance Programs of the United States. Misc. No. 22.

The State and Education—The Structure and Control of Public Education at the State Level. Misc. No. 23.

Digest of Annual Reports of State Boards for Vocational Education to the Office of Education, Fiscal Year Ended June 30, 1954.

Fourth Annual Report of the Commissioner of Education Concerning the Administration of Public Laws 874 and 815, June 20, 1954.

Education in the United States of America. Special Series No. 3.

School Facilities Survey—Projected Plans for Meeting School Plant Needs.

HIGHER EDUCATION (9 issues—September 1954-May 1955, inclusive).

SCHOOL LIFE (9 issues—October 1954-June 1955, inclusive).

Table 1.—Grants to States: Office of Education, fiscal year 1955¹

States, Territories, and possessions	Total	White House Conference on Education	Colleges for agriculture and the mechanic arts	Cooperative vocational education	Survey and school construction	Maintenance and operation of schools
Total.....	\$238,974,453	\$608,048	\$5,051,500	\$30,522,885	\$120,932,499	\$81,859,521
Alabama.....	4,417,953	12,557	100,541	819,070	2,590,998	894,787
Arizona.....	3,148,719	5,000	177,477	176,617	2,175,368	714,257
Arkansas.....	2,509,425	7,698	89,048	604,431	1,132,542	675,706
California.....	42,573,053	49,155	175,599	1,462,830	25,566,322	15,319,147
Colorado.....	4,600,514	5,698	83,218	264,598	2,339,366	1,907,634
Connecticut.....	3,536,341	8,718	90,023	296,851	1,493,759	1,646,990
Delaware.....	369,509	5,000	73,173	165,000	102,073	24,263
Florida.....	5,186,416	-----	97,644	471,508	2,989,822	1,627,442
Georgia.....	7,953,966	14,456	104,360	877,478	5,157,584	1,800,088
Idaho.....	1,455,968	5,000	75,872	183,629	757,710	433,757
Illinois.....	5,048,707	36,304	156,905	1,319,265	1,363,173	2,173,060
Indiana.....	2,998,101	-----	109,245	791,108	1,143,720	954,028
Iowa.....	1,196,551	10,505	96,146	677,803	116,834	295,263
Kansas.....	6,280,570	8,089	89,006	447,258	2,333,609	3,402,608
Kentucky.....	2,404,880	11,956	99,375	831,933	694,690	766,926
Louisiana.....	2,091,656	11,630	96,769	597,088	833,863	552,306
Maine.....	1,789,914	5,000	79,115	182,301	915,335	608,163
Maryland.....	9,202,216	10,246	93,372	368,864	5,871,720	2,858,014
Massachusetts.....	1,965,333	19,759	116,789	578,702	365,219	884,864
Michigan.....	7,277,073	27,630	133,559	1,068,101	4,818,472	1,229,311
Minnesota.....	1,788,762	12,311	99,751	695,523	856,624	124,553
Mississippi.....	1,778,164	8,803	91,735	756,771	437,213	483,642
Missouri.....	3,865,391	16,517	109,448	842,619	1,573,472	1,323,335
Montana.....	1,272,253	5,000	75,896	177,374	667,346	346,637
Nebraska.....	1,778,760	5,432	83,222	350,854	271,088	1,068,164
Nevada.....	1,777,956	5,000	71,597	139,937	961,865	599,557
New Hampshire.....	695,289	5,000	75,319	162,420	27,064	425,486
New Jersey.....	3,508,970	20,731	118,233	580,067	1,464,102	1,325,837
New Mexico.....	5,287,021	5,000	76,795	180,335	3,673,202	1,351,689
New York.....	7,869,339	61,426	217,934	1,866,018	3,883,417	1,840,544
North Carolina.....	2,538,487	16,908	110,518	1,169,633	672,253	569,175
North Dakota.....	564,726	5,000	76,181	241,993	28,174	213,378
Ohio.....	9,245,196	33,747	149,269	1,335,914	4,598,671	3,127,595
Oklahoma.....	7,789,277	9,077	92,278	534,841	4,188,054	2,965,027
Oregon.....	1,470,870	6,460	85,176	320,287	528,522	530,425
Pennsylvania.....	3,859,025	42,970	174,720	1,752,240	561,659	1,327,436
Rhode Island.....	1,923,278	5,000	77,899	121,678	1,013,735	704,966
South Carolina.....	2,909,521	8,851	91,118	602,801	1,169,239	1,037,512
South Dakota.....	1,350,150	5,000	76,511	238,440	450,242	579,957
Tennessee.....	3,217,645	13,424	102,835	872,729	1,388,580	840,077
Texas.....	15,179,437	146,921	1,512,498	8,146,833	5,373,185	-----
Utah.....	2,816,026	-----	76,872	172,329	1,757,221	809,604
Vermont.....	336,579	5,000	73,768	162,083	44,570	51,158
Virginia.....	18,027,649	-----	103,104	780,631	9,986,932	7,156,982
Washington.....	12,300,913	9,993	93,731	436,685	7,516,491	4,244,013
West Virginia.....	652,907	7,811	90,006	504,398	-----	50,692
Wisconsin.....	1,445,491	14,186	104,260	745,322	130,956	450,767
Wyoming.....	675,054	5,000	72,898	165,000	205,685	226,471
Alaska.....	3,326,368	5,000	71,283	-----	648,201	2,601,884
District of Columbia.....	110,139	5,000	-----	105,139	-----	-----
Hawaii.....	2,895,897	5,000	74,986	165,000	1,309,478	1,341,433
Puerto Rico.....	673,956	-----	50,000	613,911	10,319	-274
Virgin Islands.....	37,092	5,000	-----	32,980	-888	-----

¹ On a checks-issued basis. Does not necessarily agree with allotments or expenditures for a given fiscal year.

² Does not include \$6,725,000 paid to Housing and Home Finance.

³ Does not include \$319,716 paid to Air Force, \$2,363,051 to Army, \$13,532 to Commerce, \$5,380 to Interior \$676,161 to Navy, and \$13,326 to Veterans' Administration.

REPRINT

From the Annual Report of the
U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
1956

Office of Education

DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

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I. Introduction

FISCAL YEAR 1956 was unusually significant for American education and for the Office of Education. Throughout the country there was unprecedented recognition of the contribution of the schools to the national welfare—recognition that what the schools contribute to an individual they contribute to the strength of the Nation. The emphasis was on citizen-educator cooperation, on getting the facts, on action to improve the schools. At local, State, and National levels educators and laymen organized to appraise the accomplishments of schools, to identify and look squarely at the problems facing schools. They found much to be done.

At the local level, in rural communities, small towns, and cities, parents and other citizens displayed an increased interest in their schools; they served on curriculum and other planning committees, assisted with the school-lunch program, and worked on the school playground. Ten million members of parent-teacher associations discussed school programs, problems, and policies. They all asked for facts.

State departments of education sought solutions to old and new problems and better methods of serving the schools. They too asked for facts. In many States legislatures provided for greater financial support for schools, improved provisions for teacher welfare, and studied various methods of providing for a better education for their children.

State and local interest and activity, as well as official recognition of the severity of the educational problems, were reflected in action at the Federal level: In the White House Conference on Education, in the President's Conference on the Fitness of American Youth, in

the President's appointment of a committee on education beyond the high school, in the volume of legislative activity, and in increased demands on the Office of Education.

The Office of Education, as the agency of the Federal Government established "to promote the cause of education," was vitally concerned in all this educational ferment. Its functions, as defined by the organization act of 1867, are to collect such statistics and facts as shall show the condition and progress of education, to diffuse such information as shall aid the people of the United States in the establishment and maintenance of efficient school systems, and otherwise promote the cause of education.

The Office's primary means of discharging its responsibilities for these functions is through the collection, interpretation, and publication of statistics; through research and publication of its findings; and through rendering consultive and advisory services. From time to time administrative functions have been added to Office responsibilities, and in 1956 the Office administered Federal funds under three programs: for vocational education of less than college grade, for land-grant colleges and universities, and for school assistance in federally affected areas. Thus it will be seen that the Office is authorized to work primarily in three areas: Research, services, and the administration of grants. Some of its major accomplishments in each area will be summarized in this report.

For many years the Office has cooperated with other Federal agencies in educational and related programs, some in voluntary association and some in response to legislative mandate. The Office continued such cooperation in 1956.

White House Conference on Education

THE CONFERENCE

The Eighty-Third Congress, in response to the President's request, authorized and appropriated funds for use of the States and Territories for local, regional, and State conferences leading to a White House Conference on Education. In December 1954, President Eisenhower named a 34-member Committee for the White House Conference on Education to plan and conduct an overall study of the Nation's elementary and secondary school needs. More than 4,000 local, regional, and State conferences on education were held during 1955, involving more than a half-million citizens. Under the American system of local school control, each State and Territory evolved its own program without direction from the President's Committee. The year's activity was the most thorough, widespread, and intensive study the American people have ever made of their educational system.

The White House Conference, held November 28 to December 1, 1955,

in Washington, D. C., climaxed the series of State and Territorial Conferences. More than 1,800 persons within the States and Territories, including representatives of national organizations, took part in the discussion of the six topical questions posed at the conference.

There has been widespread agreement that the White House Conference emphasized the importance of education to the well-being of the Nation and the individual, made available to many interested citizens information on needs of education and the existing resources, and stimulated interest in education. In his Special Message to the Congress, January 12, 1956, the President commented on the conference:

Benefits are already apparent. About half a million people across the Nation, representing all segments of life, came to grips with the problems of education. The status of American education—where it is; the future of American education—where it should and can go—have been illuminated as never before. Most important of all, there has been a reawakening of broad public interest in our schools * * * no more potent force can be devised for assailing a problem than the common will to do the job. For the improvement of our educational system, the people themselves have laid the foundation in understanding and willingness to do the job.

REPORT TO THE PRESIDENT

In April 1956 the Committee for the White House Conference on Education presented its report to the President. The 126-page report is in three parts: (1) The committee's statements and recommendations, (2) the Report of the White House Conference on Education, and (3) a summary of the State conference reports.

THE COMMITTEE REPORT

The committee report contains 79 specific recommendations for the improvement of schools in the 6 areas of elementary and secondary education the conference was asked to study. From its own studies and results of State and Territorial conferences and the White House Conference, the 34-member committee concludes that the schools now affect the welfare of the Nation more than ever before in history.

The report embraces the traditional concept of education in a democracy: Schools free men to rise to the level of their abilities; they stand as the chief expression of the American tradition of fair play for every one and a fresh start for each generation. The committee also accepts the broadened functions of education: To improve the child's health; to provide vocational training; and to do anything else within its power to help bring the child up to the starting line as nearly even with his contemporaries as his native skills will permit.

The committee report recognizes the progress that has been made in American education, but points out that schools have fallen far behind the aspirations and the capabilities of the American people. To help close the gap between educational ideals and realities, the com-

mittee makes a number of recommendations. Some of them are summarized below.

1. That school authorities emphasize priorities in education, that school children be given first things first.
2. That American people deny funds, other than local, to districts which do not organize on an efficient basis.
3. That local boards quickly assess their school building needs, give the information to chief State school officers, who in turn can relay it to the Office of Education; That State and local communities do all they can to construct new buildings and that where necessity is shown to exist, Federal funds be used in such emergencies as the present.
4. That greater inducement be offered to attract and retain good teachers and that, while the shortage exists, greater effort be made to use teacher services more efficiently.
5. That a new look be taken at the question of how much money the Nation should spend on education. (A doubling of present expenditure during the next decade would be an accurate reflection of the importance of education to society. Funds must come from all levels of government. Good schools are admittedly expensive, but not nearly so expensive in the long run as poor ones.)
6. That every possible step be taken to encourage the interest and activity of citizens in school affairs.
7. That a White House Conference on higher education similar to the one on elementary and secondary education be held promptly.

CONFERENCE REPORT

Part 2 of the report to the President—the official report on the White House Conference—presents the six summary conclusions reached by the discussion groups on the six questions participants had been asked to consider. A few significant conclusions are quoted below.

What Should Our Schools Accomplish?

It is the consensus of these groups that the schools should continue to develop:

1. The fundamental skills of communication—reading, writing, spelling as well as other elements of effective oral and written expression; the arithmetical and mathematical skills, including problem solving. While schools are doing the best job in their history in teaching these skills, continuous improvement is desirable and necessary.

New Challenges in Education

Consideration must be given to the need for continuing growth and development in education at all levels in amount and scope, to keep up with the economic, social, and moral implications resulting from the advances in technology and science.

What Are Our School Building Needs?

It appears that under present plans only 2 or 3 States have been quoted as stating that they can meet their building needs for the next 5 years.

We have taken the question exactly as stated. Under the present plans and time limitations stipulated, it seems to be virtually impossible for most of the States to meet school building needs.

The general consensus was this: No State represented has a demonstrated financial incapacity to build the schools it will need during the next 5 years. But, with the exception of a few States, none of the States presently has plans which indicate a political determination powerful enough to overcome all of the obstacles.

Some Territories and a few States may need outside financial assistance.

How Can We Get Enough Good Teachers—And Keep Them?

We believe that, to increase the supply of good teachers from any source, three basic considerations must be kept in mind:

1. The prestige and status of teaching must be comparable to other professions within the community.
2. The salary structure must be high enough and flexible enough to compete effectively with other fields bidding for quality manpower.
3. The teacher's job must be so defined as to challenge and attract the interest of talented people.

How Can We Finance Our Schools—Build and Operate Them?

The participants approved by a ratio of more than 2 to 1 the proposition that the Federal Government should increase its financial participation in public education. Of those favoring such increase, the overwhelming majority approved an increase in Federal funds for school building construction. On the issue of Federal funds to the States for local school operation, the participants divided almost evenly. A very small minority was opposed to Federal aid for education in any form.

How Can We Obtain a Continuing Public Interest in Education?

We agreed that the energy, intellectual effort, and investment of money on the White House Conference on Education will be futile unless specific and positive actions are undertaken at the local, county, State, and National levels to meet the existing crisis in education and plan for future needs.

Five of the six conference reports commented on the role of the Office of Education in the current effort to improve the Nation's schools. Among the recommendations on the Office were the following: That the Office be further strengthened to perform the functions it is now performing in making reports, in carrying on research, and in providing promptly statistical information needed; that the Office make a study of certification standards and establish a basis for reciprocity in certification among the States.

The official report also recommended that a White House Conference on Education be held periodically at national, State, and local levels.

STATE AND TERRITORIAL SUMMARIES

Part 3 of the report, a summary of State and Territorial reports, made a number of recommendations and suggestions on the Office and Office activities. Among them were the following: That the Office increase its staff in adult education; disseminate its findings more

widely; and expand its services to include regular communications on research in school building construction.

FOLLOWUP

Many States and national organizations are following up the White House Conferences in a variety of ways. Missouri is planning 6 followup conferences; Oregon has held 32 followup meetings; and other States have organized planning committees. National Organizations are working on topics of the White House Conference, teacher recruitment, school financing, organization of citizen committees, and others.

In the Office of Education an Advisory Committee of National Organizations composed of lay and educational organizations advises and makes recommendations to the Commissioner and his staff "to promote the cause of education throughout the country." It also advises on Conference followup work.

The Report of the White House Conference Committee is available from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

President's Conference on Fitness of American Youth

Because of his concern that we "do more than we are now doing to help our young people become physically fit and therefore better qualified, in all respects, to face the requirements of modern life," President Eisenhower called a Conference on Fitness of American Youth. This conference was held at the U. S. Naval Academy, Annapolis, Md., on June 18-19, 1956. The Office of Education assisted the White House and Vice President Richard M. Nixon, who served as conference chairman, in the planning, conduct, and followup of this important meeting.

The 150 participants included representatives of local, State, and Federal Governments; professional education, health, medical, and recreation organizations; child and youth-serving agencies; civic groups; the motion picture industry; radio and television networks; amateur and professional athletics and sports; and newspaper and magazine editors and publishers; sportscasters and sportswriters.

The conference discussion resulted in a number of important findings and recommendations. Among these were the following:

1. A fitness program should provide for development of the total person—physical, spiritual, mental, emotional, social, cultural—and should recognize the interrelationship of all personality factors.
2. Research is needed to determine the full nature and dimensions of the youth fitness problem and to supply the facts essential in formulating new policies, plans, and programs, and in improving old ones.

3. Schools, community recreation agencies, youth organizations, and other groups should take steps to expand and improve programs of health, physical education, recreation, sports, and other aspects of youth fitness by providing necessary leadership, programs, and facilities to meet the needs of all the Nation's boys and girls.

4. Within the community, and on regional, State, and national levels as well, full coordination and cooperation among public and private agencies and organizations and interested citizens are needed to insure wise planning and efficient use of fitness resources.

5. Although a regimented national youth program is to be avoided, a number of Federal agencies do provide appropriate services relating to youth fitness. Therefore, the President should provide for extension and improved coordination of Federal services and should establish a citizens' advisory group to lend assistance toward this end.

In response to the last recommendation, President Eisenhower, through an Executive order issued on July 16, 1956, established a President's Council on Youth Fitness and a President's Citizens' Advisory Committee on the Fitness of American Youth. The council is composed of the Vice President of the United States, who serves as chairman, and the heads of departments that are concerned with the activities of young people—the Departments of Health, Education, and Welfare; Agriculture; Interior; Justice; and Labor. The creation of a council at cabinet level should provide for better coordination of the activities of some 30 Federal agencies that touch the lives of children and should stimulate and improve existing programs.

The Citizens Advisory Committee will be appointed because the conference recommended and the President agreed that the American people need to be made freshly aware of the importance of physical and other recreational activity. The President points out the need for a comprehensive study and reevaluation of all government and non-government activities relating to the fitness of American youth.

Through the work of the council and the committee, American citizens in general should benefit from the findings and recommendations.

The Office of Education will cooperate with the council and the committee.

The Report to the President of the U. S. on the Annapolis Conference is available in booklet form from the Superintendent of Documents, U. S. Government Printing Office.

President's Committee on Education Beyond the High School

In his special message to the Congress on January 12, 1956, President Eisenhower expressed concern about the growing problems in

the field of education beyond the high school and his belief that immediate action on the problem was needed. He said:

Shortages now exist in medicine, teaching, nursing, science, engineering, and in other fields of knowledge which require education beyond the level of the secondary school. Changing times and conditions create new opportunities and challenges. There are now possibilities for older persons, properly trained, to lead more productive and rewarding lives. The tide of increasing school enrollment will soon reach higher educational institutions. Within 10 years we may expect 3 students in our colleges and universities for every 2 who are there now.

Higher education is and must remain the responsibility of the States, localities and private groups and institutions. But to lay before us all the problems of education beyond high school, and to encourage active and systematic attack on them, I shall appoint a distinguished group of educators and citizens to develop this year, through studies and conferences, proposals in this educational field. Through the leadership and counsel of this group, beneficial results can be expected to flow to education and to the Nation, in the years ahead.

The President's concern for this area of education was shared by the Committee for the White House Conference on Education and by interested citizens generally.

In April 1956, President Eisenhower appointed a committee of 33 prominent lay leaders and educators to undertake a large-scale study of post high school education.

At the first meeting the committee agreed on basic objectives: First, to collect, assemble, and disseminate information for the purpose of increasing public awareness of the problems which lie ahead in the field of education beyond the high school; second, to encourage the planning and action that should be undertaken by institutions and groups of institutions, locally and nationally, publicly and privately, to meet the impending demands; and third, to advise the President on the proper role of the Federal Government in this field.

In considering these objectives at its first and second meetings, the committee discussed a wide range of problems on which facts were needed and on which planning and action should be forthcoming. For example, the following questions presented themselves:

What aims should guide the provision of education beyond the high school? What should be done to supply the quantity and quality of persons for science, industry, government, and education? to meet other educational needs of persons with a wide range of abilities and interests before, during, and after their work careers? to staff the schools and colleges with qualified teachers? How can physical facilities—classrooms, laboratories, libraries, dormitories—be provided for the 5 to 7 million students who will be ready for college by 1970? What will be the annual cost of educating, or of failing to educate, the number of persons necessary to serve the vocational and other

needs of an increasing population? What adjustments may be needed in existing institutions? What, if any, changes in the role of the Federal Government in this field should be made? What implications are there for higher education in the international and defense activities of the United States?

The committee has reached general agreement upon the most effective method of working.

The President's committee, assisted by a small staff and by consultants, will collect, compile, and organize statistics and other information needed to shed light upon the true dimensions of the problem areas mentioned above, and will publish a series of reports. States will be asked to organize State committees, made up of educators and lay leaders to study the State conditions and stimulate interest and action at the institutional, local, and State levels. During the spring of 1957 the President's committee will sponsor a series of perhaps five regional conferences to emphasize current problems and to assist the States in framing the basic issues for consideration at the local and State levels.

States will then develop their own studies, and conferences will be held to clarify and crystallize public views on such questions as those suggested above, and to encourage institutional, local, and State activity to accomplish agreed-upon objectives.

During this process the President's committee will have a good opportunity to decide whether it should call a national meeting. If such a conference is held its purpose will be to have representative Americans, well grounded by their State and regional studies, gather to discuss these problems from a national perspective and to advise the President's Committee on pertinent matters.

Legislation

Fiscal year 1956 was a period of increased legislative activity. Although the number of public laws enacted by the United States Congress affecting education was relatively small, the scope and variety of education bills introduced and considered indicate a growing concern with the Nation's educational system. Some of the bills introduced proposed scholarships and fellowships, veterans' educational benefits, loans for college housing, assistance for medical school construction, graduate and undergraduate traineeships, tax deductions or exemptions for tuition payments, international exchanges of students, general aid for school construction, aid for federally affected areas, nurse training, and fine arts.

The area of greatest activity consisted of proposals for general Federal aid to school construction. During the 84th Congress the Administration's legislative program included recommendations for the enactment of such legislation, and the President, on February 8, 1955,

and again on January 12, 1956, submitted to the Congress special messages on this subject. A general school construction aid bill was reported to the House of Representatives in 1956 and debated, but failed to pass.

Among the measures enacted by the Congress during 1956, 6 are of direct interest to education: Public Laws 204, 221, 345, 382, 597, and 634.

Public Law 345, approved August 11, 1955, amends Title IV of the Housing Act of 1950 by increasing the amount of college housing loans that may be outstanding at any one time, from \$300 million to \$500 million. It also expands the program to permit loans on additional types of self-liquidating education facilities (dining halls, student centers, infirmaries, etc.), provides for a decreased interest rate for borrowers, and lengthens the maximum maturity on loans from 40 to 50 years. The added funds will help colleges build to meet expanded enrollments.

Several amendments to legislation providing assistance for schools in federally affected areas (Public Laws 815 and 874, as amended) were enacted during the year.

Public Law 204, approved August 1, 1955, which amends Public Law 874, provides for the continued operation of a limited number of schools on military installations. Under the amendment the responsibility for determining whether the free public educational facilities available to children residing on military installations are "suitable," within the meaning of Public Law 874, will be exercised jointly by the Commissioner of Education and the Secretary of the military department concerned, after consultation with the appropriate State school agency.

Public Law 221, makes Oak Ridge, Tenn., and Richland, Wash., atomic energy installations, eligible for payment under the provisions of Public Law 874.

Public Law 382 amends Public Laws 874 and 815, as amended, by extending for 1 additional year assistance to local agencies in areas affected by Federal activities; liberalizes the formula for calculating payments; postpones for 1 more year the 3-percent absorption requirement; provides for the transfer of title to certain federally constructed school facilities to local educational agencies and improves the administrative machinery for certain "unhoused" and Indian children.

Public Law 597 approved June 19, 1956, established a 5-year, Federal grant-in-aid program to the States to assist in extending public library services to rural areas. The act authorizes Federal appropriations of \$7½ million annually for the fiscal year 1957 and each of the next 4 fiscal years for payments to States whose plans for the further extension of public library services to rural areas without such services,

or with inadequate services, have been approved by the Commissioner of Education.

The act provides for a minimum allotment of \$40,000 annually to each of the States (\$10,000 to the Virgin Islands) plus an allotment from the remainder of the appropriation based upon each State's rural population in relation to the rural population of the United States as a whole. The allotment for each State must be matched by the State on the basis of a formula which takes into account the relative financial ability of the States.

Public Law 634, approved June 29, 1956, establishes an educational assistance program for children of servicemen who died as a result of a disability or disease incurred in line of duty during World Wars I and II or the Korean conflict. Approximately 156,000 war orphans, average present age 10 to 14 years, will be entitled to 36 months of education and training under the act.

During the year the Office of Education further developed its services in the field of school law, particularly by providing information on State legislation to educators and laymen who are working to improve the nation's school system.

Progress and Problems

President Eisenhower in his special education message to the Congress, January 12, 1956, said:

Signs of heartening progress have come to light. Among these are classroom construction at a higher rate than ever before; teachers' salaries increased in many communities; the number of small, uneconomical school districts reduced; substantially more young people preparing for the teaching profession; private gifts to higher education at new heights; support of education at all levels greater than ever before.

Encouraging as these advances are, they are not enough to meet our expanding educational needs. Action on a broader scale and at a more rapid rate is clearly imperative.

We still do not have enough good classrooms for our children. There is insufficient emphasis on both short-range and long-term research into the core of educational problems. We need examination and study, from a broad viewpoint, of the increasing needs of higher education. These lacks are magnified by an ever-increasing stream of student enrollment and the increasing complexity of modern society.

In his message the President called for action on some of the most pressing problems in education: Federal aid to relieve the classroom shortage, a vigorous program of educational research to be conducted by the Office of Education, State and local attention to the need for good teachers, and for a commission study of education beyond the high school.

ENROLLMENT

A few figures will indicate the size of some of these problems. Total enrollment in public and nonpublic schools, including higher institutions, in 1955-56 was estimated by the Office of Education at 39,798,700, an increase of 1,670,200 over 1954-55. (See table 1.) Total estimated population in the United States was 165,271,000 at the beginning of fiscal year 1956. Total estimated enrollments therefore represented 24.1 percent of total population.

The estimated enrollment in elementary and secondary schools was 1,101,300 higher than the total in 1954-55, an increase of 3.1 percent. Elementary schools enrolled an estimated 776,200 more pupils in 1955-56, an increase of 2.8 percent over 1954-55, and secondary schools an estimated 325,100 more, an increase of 4.4 percent.

A total of 2,996,000 students enrolled in colleges and universities, the largest in our history and the fourth year of consecutive increases, with each of the last 2 years adding about one-fourth of a million students. This increase was the result of larger high school graduating classes and a larger percentage of students going on to college.

TEACHER SHORTAGE

The teacher shortage continued. When schools opened in the fall of 1955, they faced a shortage of 141,300 qualified elementary and secondary teachers. (See table 2.) The shortage had to be met by additional emergency teachers, by the reentrance of former teachers into the profession, and by further overcrowding of the classrooms. In the computation of the total shortage the additional teachers needed to reduce the present overcrowding or to enrich the curriculum were not taken into account.

CLASSROOMS

A record 62,600 classrooms and related facilities for elementary and secondary schools were constructed during the 1955-56 school year at an estimated cost of \$2.4 billion. Even with this large construction total, the gap between the number needed and the number of classrooms available remains wide.

MIGRANT CHILDREN

The Office continued its efforts to improve the educational opportunities of children of agricultural migrant laborers, estimated at 600,000 children in the United States in 1956. During the year Office staff members worked with two interagency groups devoted to the problem: The subcommittee of the President's Interdepartmental Committee on Children and Youth (now the Subcommittee on Children of Agricultural Migrants) and the Committee on Migratory Labor. The Office also periodically distributes packets of materials

on the education of migrants, inventories of State and Federal resources, and analyses of problems.

SCHOOL DROPOUT PROBLEM

The dropout problem continued to be serious. Of the 4½ million 16-to-17-year-olds in this country, over a million were not in school, and of these only a few more than half were employed. Some progress has been made, however, according to Office studies. A larger percentage of high school youth (age 14 to 17 years) in public and private schools is enrolling in high school—85 percent enrolled in grades 9 to 12 in the fall of 1955, as compared with 62 percent 10 years ago, and a larger percentage of those who enter is staying to graduate, 63 percent in 1954 as compared with 47 percent 10 years ago. The Office, in cooperation with the Department of Labor, conducted a Back-to-School Campaign during the summer of 1956.

MANPOWER SHORTAGE

Few developments in recent years have had such vast implications for American education as the growing public concern over existing shortages of technically trained manpower. Public concern, intensified by reports that the U. S. S. R. was producing increasing numbers of scientists and engineers, stimulated interest in scientific and technical training programs in U. S. colleges and universities.

Central to any consideration of this manpower problem is education, and the chief factor in the expansion of trained manpower is the capacity for training—the facilities for education, the need to improve teacher qualifications, curriculums, methods of instruction, facilities, and equipment, all are part of the problem. For this reason the responsibility falls on education to consider the needs created by technical and scientific advances. The Office of Education worked closely with the National Science Foundation, scientific organizations, Federal defense agencies, professional education and teacher-preparing organizations to coordinate efforts to increase the supply and improve the quality of trained scientists, engineers, and teachers in these fields.

SIGNS OF PROGRESS

There were other signs of progress in education, among them the following: More than 9 million pupils, or 31 percent of the total, were transported to and from school daily. Expenditure per pupil in average daily attendance increased from \$351 in 1953-54 to \$380 in 1955-56. The movement toward teaching foreign language in elementary schools gained momentum; 15 years ago fewer than 15,000 pupils were getting foreign language instruction in elementary schools, but in the school year 1955-56, nearly 300,000 were. There was increasing

cooperation between local schools and State departments of education and between State departments and the Office of Education.

At every level plans were being made. In the Office of Education plans provided for a broader program of research and for expanded service to education.

The Office of Education has made an effort to improve these phases of education all along the line. Specialists in science and mathematics have made a number of research studies, written reports of their findings, and served in consultive and representative capacities with professional associations and groups to improve the status of education in these fields. During the year the Commissioner organized an informal Office task force to keep abreast of rapid developments in the scientific manpower field and to publicize these developments in the interest of better coordination of all activities related to the field. Office specialists organized and disseminated data on educational developments pertaining to the shortage and with possible solutions. Continuing studies were made of earned degrees and offerings and enrollments in science and engineering.

Three Office specialists worked with the National Committee on the Development of Scientists and Engineers on methods and procedures of improving mathematics and science education in elementary and secondary schools.

Through its periodicals, *School Life* and *Higher Education*, the Office made information available on scholarships and grants offered for science study and digests of studies.

Research

Authoritative information is being sought about education at every level. Federal agencies, national associations in commerce, industry, and the professions, State departments of education, and local groups—all are demanding more facts. Probably at no time in history has there been greater need for factual information on education nor a greater audience for it than in the last few years.

In his special education message to the Congress the President said: "Basic to all endeavors in improving education is a vigorous and farsighted program of educational research."

In 1956 the Office of Education took major forward steps to provide an expanded and strengthened research program. Under the expanded program Office research is conducted under cooperative agreements with agencies outside the Federal Government, by the Office Research and Statistical Services, and by Office specialists. Although the cooperative phase of the program was emphasized in 1956, each phase of the program is important, each phase supplements the other,

and each contributes to the strength of the overall program. The intent and scope of the program were indicated by Secretary Folsom in October 1955. He said:

In the educational field, as we have already seen in health, one of the most basic needs is more research. We are working now on plans for an expanded program of educational research, which we hope to submit to the next Congress. The purpose is to help our Office of Education render a still more significant and effective service in leading the way for better education of all our children. We plan to study such specific problems as educating the retarded child, so he can lead a normal productive life. We also plan more research into the problems of educating the child with special abilities, so the Nation may utilize these abilities more fully. We plan research into the chronic problems of school housing, teacher staffing, and school financing. We hope to bring some light to unanswered questions that have handicapped our educational program for many years. In a related field, we hope to make vast improvements in our educational statistics, so we may specify more definitely just what and where our problems are and what needs to be done about them.

Some of the plans described by Secretary Folsom were put into operation in 1956. Details on the recently developed and the continuing programs are reported in the following sections of this chapter.

COOPERATIVE RESEARCH PROGRAM

The Office of Education operates three types of research programs: (1) Research studies conducted by Office of Education specialists, (2) statistical studies conducted by the Research and Statistical Services Branch, and (3) cooperative research with colleges, universities, and State educational agencies. All three programs are important, but cooperative research is the newest and is therefore given the most attention in this report.

Under Public Law 531, 83d Congress, the Commissioner of Education is authorized to "enter into contracts or jointly financed cooperative arrangements with universities and colleges and State educational agencies for the conduct of research, surveys, and demonstrations in the field of education." As a first step in initiating a research program under this law, the Commissioner asked specialists on the Office staff to identify a number of the most pressing problems in education. Then, with the advice of several leaders in education and research who served the Office as consultants, these problems were reviewed and ten of them were selected as particularly appropriate for concentration of efforts in the beginning phases of this program.

In developing the program the Office had the advice of an ad hoc committee of five outstanding research specialists in the field of education. Later the Commissioner appointed a permanent, nine-member committee which included the five members of the ad hoc committee and research specialists representing the social sciences, medicine, and the physical sciences.

The program emphasizes three broad areas of interest—the conservation and development of human resources, the staffing and housing of our Nation's schools, and the educational implications of our expanding technology and economy. In the human resources area there are included such problems as the education of the mentally retarded, the development of special abilities of students, the educational aspects of juvenile delinquency, and the retention and continuation of students. In the second area attention is focused on the problems of staffing the Nation's schools and colleges and the planning and costs of school construction, with special emphasis on institutions of higher education. In the third area there are such problems as the implications of expanding technology for vocational education, the educational problems resulting from population mobility, the educational needs of low-income, rural families, and the educational uses of television.

A general proposal for an attack through research was prepared on each of these ten problems. The proposals were reviewed by the ad hoc research advisory committee and by outstanding specialists in certain areas who served the Office as consultants.

Because of current public concern with the education of mentally retarded children, a special staff was set up to plan for research in this area and an ad hoc advisory committee on the education of the mentally retarded was appointed. With the advice and guidance of the committee, the Office prepared an extensive statement on the major research needs in this area and the facilities in institutions of higher education and in the State educational agencies which may be suitable and available for research.

The research advisory committee established the following criteria to be used in selecting proposals suitable for support by the Office: A project should (1) promise to have a value within a reasonable time, (2) attack a problem in which progress has been delayed by wide gaps in knowledge, (3) have significance for the country as a whole, and (4) give preference to new projects or to those in which duplication would be desirable as a scientific check on earlier conclusions. In recommending projects to be carried out in the cooperative research program, the committee will also consider (1) the competence of the person who will direct the project, (2) the research resources of the institution or State department of education under whose aegis it will be directed, (3) the scientific merit of the project, (4) the extent to which the project will help to develop research personnel, and (5) the need for research in the area proposed in terms of the total educational research picture.

Development of this program was a major activity of the Office during the year. By the end of June the Office had received 70 pre-

liminary proposals for research, and the number seemed likely to increase rapidly after information on the availability of funds became known.

RESEARCH AND STATISTICAL SERVICES

Reference Service

The work of the research and statistical reference service of the Office continued to expand throughout the year. New procedures for making current statistics available were instituted. In response to demands from governmental agencies, educational associations, and private industry, annual projections to 1965 were prepared for public and private elementary and secondary enrollments; projections to 1970 were prepared for total enrollments, fall enrollments, and first-time enrollments in institutions of higher education; and number of degrees to be conferred, by level, and by sex were projected to 1970. In addition, annual projections to 1965 were made for degrees to be conferred in six major fields of study (biological sciences, engineering, healing arts, physical sciences, social sciences, and "all other").

A 31-page set of National and State statistical tables on education was prepared for the Statistical Abstract of the United States (a Department of Commerce publication). UNESCO was furnished a 33-page report on educational statistics for the period 1950-54, inclusive, and on the attitude of the government toward the standardization of educational statistics for use at the Geneva UNESCO Conference.

Prompt publication of summaries of recent statistical studies was obtained through articles in School Life and Higher Education.

Research Consultation

Consultive services and appropriate statistics were provided to the President's Commission on Veterans Pensions, to an ODM subcommittee on specialized personnel, and to the Subcommittee on Low-Income Families of the Joint Committee on the Economic Report.

RESEARCH STUDIES BY OFFICE SPECIALISTS

Office specialists in the various subject matter fields and levels of education made a number of research studies in 1956. Some of the studies were made at the request of professional agencies and organizations; for instance three projects were carried out at the request of the Council of Chief State School Officers. Other studies dealt with problems widely recognized as urgent by educators, Federal officials, or laymen, such as Supervision in Rural Schools. Studies made under this phase of the research program are discussed under the appropriate subject heads in this report. Published reports of the

specialists' findings, interpretations, and suggested applications are listed under Publications.

Services to Education

One of the ways in which the Office has traditionally promoted the cause of education is through service to State and local school systems. In rendering this service the Office provides information, consultation, and advice on education at the different levels and in fields.

ADMINISTRATION

One of the most significant educational developments in the 20th century is the continued rise in leadership of State departments of education. This movement has been accentuated in the past few years and is reflected in the growing stature of the professional staffs of these departments, the higher level of salaries attached to the positions, and the recognition by local school officials, by college and university staffs, and by the public in general of the expanding program of services which the departments are now giving. No small part of this increase in leadership has been due to the efforts of the departments themselves. The Office of Education has assisted them by making nationwide surveys and studies which define the role of State agencies in the educational scheme and delineate the responsibilities of personnel in the departments in the various areas of service.

During the 1956 fiscal year the Office of Education engaged in several nationwide cooperative studies which have bearing on policy and good practices in State school administration. Studies dealing with the responsibilities of the State departments of education for school plant services and for pupil transportation were published during the year.

During the year the Office, in cooperation with the American Association of School Administrators, the Association of School Business Officials of the United States and Canada, the Council of Chief State School Officers, the Department of Rural Education, the National Education Association, and National School Boards Association, completed a study entitled, "Financial Accounting for Local and State School Systems." Nearly 200 representatives of the cooperating organizations participated in 2 national and 8 regional conferences which shaped the financial accounting handbook. The handbook will be the basic guide in the United States for financial accounting for local and State school systems. To reflect accurately the condition and progress of education at local, State, and national levels, educational data must be a matter of record at its source and must be recorded in terminology that means the same thing from place to place. This

handbook will serve education everywhere as the guide for recording financial data so that it will have the same meaning to all. It will greatly improve the basis for educational research, the comparability of educational information, and the reliability of State and national summaries.

ORGANIZATION

The establishment of soundly organized local school districts continued to be a major problem in American education—in 1955 there were over 59,000 school districts in the Nation; of the total number nearly two-thirds had fewer than 10 teachers, over half were organized for elementary school purposes only, and more than 1 of every 7 did not operate a school of any kind. Practicable approaches to dealing with this problem effectively were the concern of a special Office project which was virtually completed during the year, with publication of the report scheduled in fiscal year 1957. This project is the first major school district reorganization study undertaken by the Office of Education since completion of the Local School Units Project in the late 1930's.

Coincident with carrying on the project, the Office rendered consultive services to legislative councils, special commissions, State departments of education, and other agencies in a number of States where efforts were being made to develop more effective reorganization programs.

The rapid growth of the National School Boards Association and of State associations and an increasing recognition of the importance of effective school board stewardship have emphasized the need for research on statutory provisions governing local school boards and the procedures employed by them in carrying out their responsibilities. To meet this need a series of studies was launched; the first in the series was largely completed in 1956, and a report of the study is scheduled for publication in fiscal 1957.

SCHOOL FINANCE

Throughout the year the Office provided service and information on financing the schools. More and more difficulties of financing the programs of education became evident. To help finance the schools the State legislatures have been approving larger appropriations and enacting laws which provide improved methods of allocating State funds to the schools. Local boards of education have also been approving larger budgets, securing larger amounts from the general property tax, and seeking new sources of local revenue for the public schools. Increases in enrollments, demands for additional school services, and the need for the new school buildings indicate that the

methods of financing the schools will continue to require more attention in the months ahead.

SCHOOL HOUSING

The Nation is continuing to spend more than \$2 billion a year for public elementary and secondary school construction. This annual expenditure, however, is not sufficient to erase the existing deficit of classrooms, to house the increasing enrollment, and to replace the schools that become obsolete each year.

Activity within the States indicates a trend toward improving the pattern of financing school construction, through such measures as district mergers, increasing legal bonding limits, and State financial assistance through grants and loans.

The Office of Education promoted and participated in cooperative planning by educators, architects, and lay groups to improve the educational adequacy of new facilities.

One of the major school plant problems, which is still only partly solved, is the acquisition of adequate and properly located sites to accommodate the ever-increasing requirements for new schools to serve a growing and mobile school population.

A recent Office study of State school plant services revealed a trend toward the provision of more and better school plant services and increased leadership by State departments of education.

ELEMENTARY EDUCATION

The Office has continued to give leadership to professional and lay organizations concerned with education at the elementary level, to elementary staff members in State departments of education, to supervisors in county schools, and to individuals and groups in local communities through in-service activities in town or city, or sponsored by colleges and universities. This leadership has been concerned with rounding up sources of information as well as specific items of information on many problems, and interpreting school problems and programs to parents and to teachers needing such help.

One of the important ways of identifying major problems and of working on these problems has been the Annual Conference on Elementary Education held this year with 62 national professional and lay organizations represented. The theme of the conference was "Working Together for Children in 1956."

Research was used in such studies as Status of Physical Education for Children of Elementary School Age in City School Systems; and what some States have been doing about the recruitment of teachers. Reports of these studies are scheduled for publication in fiscal 1957.

SECONDARY EDUCATION

During fiscal year 1956 the Office devoted considerable time and attention to the pressing manpower problems in such professional fields as science, mathematics, and teaching. Office of Education specialists in mathematics and science worked closely with such voluntary professional organizations and government agencies as the American Association for the Advancement of Science, the National Science Teachers Association, the National Science Foundation, and the President's Committee on Science and Engineering. Recommendations were made for the guidance of action programs to obtain more qualified persons in the shortage areas through cooperative efforts to improve the quality of instruction programs and to increase the number of teachers in secondary schools. Studies were made of science and mathematics in public high schools. In addition, plans were made for a survey of the teaching loads and the preparation of science and mathematics teachers, to be made by the Office in cooperation with State departments of education and the National Science Foundation.

In conjunction with the Interdepartmental Committee on Children and Youth, the Office of Education, the Department of Labor, and the Employment Service studied various problems associated with the transition of youth from school to work. An Office bulletin offers advice useful to school administrators interested in initiating and improving work experience education programs in the high schools.

At the request of the Council of Chief State School Officers, the Office made a study of the curriculum responsibilities of State departments of education. This study will be carefully analyzed by the study commission of the council in an effort to improve leadership responsibilities of State education departments and relationships with local schools. The study was a joint undertaking of the Elementary and Secondary Sections.

To find ways of effectively coping with the pressing problems in secondary schools the Office called a conference of selected State directors of instruction to discuss (1) current developments in secondary education, (2) ways of improving secondary school programs, (3) research being carried on by State education departments, and (4) the program of the Office of Education and ways in which the Office can more effectively assist State education officials.

ADULT EDUCATION

During the year Office staff members worked with national organizations and State and regional groups on the role of adult education in promoting better health, improved human relations, and vocational efficiency and adjustment, including such organizations as the National Association for Practical Nurse Education, the Virginia

Joint Conference of Vocational and Industrial Arts Services, and Alpha Kappa Mu Honorary Society. The Office continued to cooperate with the Section on Fundamental and Literacy Education of the Adult Education Association on a variety of activities in developing a national commission on literacy, and with the National Council on Naturalization and Citizenship on the education of the foreign born.

The Office assumed responsibility for organizing and conducting the Group and Work Sessions on Education of the Federal State Conference on Aging, and for writing the conference report.

INTERGROUP EDUCATION

The Office of Education continued to cooperate with the National Educational Association and the American Teachers Association in promoting the use of the kit and packet of materials on intergroup education. Staff members participated in several conferences on planning the extension of intergroup education.

In addition, consultive services were rendered to the Council of National Organizations, National Congress of Colored Parents and Teachers, Advisory Committee on Parent Education of the National Council of Churches of Christ in the USA, and to the Steering Committee of the Tuskegee Institute Self-Study.

EXCEPTIONAL CHILDREN

Programs for the education of exceptional children in the United States have been increasing rapidly, but their expansion is retarded by such factors as lack of qualified teaching personnel and the need of more knowledge about these children and their deviations. Within the last year the Office of Education has done something about both of these problems.

For several years the Office has been giving leadership to a nationwide study, "Qualification and Preparation of Teachers of Exceptional Children." The general purpose of the study is to aid in securing for the Nation's schools the necessary number of teachers and teachers with the best possible qualifications. Specifically it is hoped that the findings will contribute to a better understanding of (1) competencies needed by teachers and other special education personnel and (2) the kind of experiences and professional preparation believed to contribute to effective work with the various types of exceptional children. To this Office-directed project more than 2,000 leading educators have contributed either through membership on one of 15 committees or by providing information through inquiry forms.

During the year a national spotlight was turned on the problems of educating the mentally retarded. The Office is now giving leadership to the solving of some of these problems, not only through the

special project on teacher preparation but also through cooperative research on various aspects of mental retardation, mentioned earlier.

AUDIOVISUAL EDUCATION

The use of audiovisual educational materials continued to expand during the year with attention being given experimentally to the use of these materials, particularly sound motion pictures, in alleviating the shortage of qualified teachers. During the year a trend toward a closer integration of audiovisual and printed materials with school curriculums became apparent.

The Office of Education continued to provide services relating to the audiovisual materials of the Federal Government. It catalogued the 5,098th Government film for Library of Congress catalog cards and issued a 650-page catalog, *Government Films for Public Educational Use*.

As part of its program to strengthen State and local educational resources, the Office prepared its 5th edition of a directory of State and local sources of educational films, which identifies and describes the resources and services of 3,300 16mm film libraries.

In line with its overall policy of making fact-finding comparative studies of the functions, responsibilities, and services of the various State departments of education, the Office took preliminary steps (including the preparation of a questionnaire) toward such a study of audiovisual education in the various State governments. The study will be completed and published in fiscal year 1957.

The Office of Education, with a complete file of all Government films, continued to provide a central reference service on the films of all agencies; and, in addition, to answer miscellaneous inquiries (weekly average 150) for audiovisual information.

RADIO-TELEVISION

Throughout the Nation there was convincing evidence of interest in the educational uses of radio and television in the increase in number of stations and number of courses offered on the air. The number of radio stations owned and operated by colleges, universities, and school systems increased from 160 in 1955 to 176 in 1956, and the number of noncommercial educational TV stations, from 15 in 1955 to 26 in 1956. Some of the TV stations were supported by public funds; others either totally or in part by foundations and subventions of funds; and still others by local communities. There was also a general increase in the number of courses offered and the number of students enrolled. At 60 institutions 400 courses were available for university credit. At a single Junior College of the Air 4,000 students were registered for evening courses.

The Office served educational institutions, public and private, with materials, information, and advice on conducting their programs. Office cooperation with the Department of Defense, Department of Treasury, Department of State, United States Information Agency, Bureau of Standards, Library of Congress, International Cooperation Agency, and similar government agencies has brought about a successful relationship in dealing with common problems by combined effort in educational matters affecting these various services.

International radio and television received increased attention. The United Nations, UNESCO, individual foreign broadcasting systems in Europe, the Near and Middle East, Africa, Australia, South America, and the Far East regularly exchange educational ideas and program offerings with the Office.

CIVIL DEFENSE EDUCATION

The most significant activities of the Civil Defense Education Project carried on in the Office have been built around formal agreements with State departments of education in Connecticut, Michigan, and California for the operation of civil defense education pilot centers. These centers have developed instruction materials for use by elementary and secondary school teachers. The materials listed below were prepared by teachers, supervisors, administrators, and curriculum specialists in accordance with established procedures and policies of each State:

Connecticut :

- (1) Education for Natural and Wartime Emergencies
- (2) Curriculum Guide for Emergency Education

Michigan :

- (1) Civil Defense in the Classroom
- (2) Film strip for civil defense in schools

California :

- (1) Civil Defense for Personal and Family Survival
- (2) Some Suggestions for Introducing Civil Defense Into the Curriculum

Materials developed in the three States were reviewed in a 5-day conference sponsored by the Office of Education in cooperation with the Federal Civil Defense Administration in Battle Creek, Mich. The conference was attended by representatives of the States and larger city school systems. Recommendations and suggestions of this group have been incorporated in a handbook on civil defense for schools. It contains information and suggestions for school administrators and teachers planning protective measures in school civil defense.

GUIDANCE AND STUDENT PERSONNEL SERVICES

On July 1, 1955, the Office of Education expanded its guidance and student personnel services to (1) assist local and State authorities

in initiating or expanding services suitable to their needs, (2) cooperate with interested public and private schools and agencies, (3) serve as a clearinghouse for information especially adapted to school use, and (4) prepare and issue professional materials.

During the year the Office prepared and distributed pamphlets and leaflets on occupations, guidance programs, lists of guidance officials, State certification requirements, and testing programs. Staff members carried on continuing research in such selected guidance areas as the problem of "dropouts," building needs for guidance services, and summer and academic-year offerings at colleges and universities in the preparation of guidance workers.

The Office also worked with agencies and groups, both private and governmental, concerned with improving services in this field. For instance, staff members cooperated with the Department of Labor in developing studies and providing information; with the Departmental Committee on Juvenile Delinquency, a subcommittee of the Inter-Departmental Committee on Children and Youth; and with the representatives of the Atomic Energy Commission, the American Medical Association, the American Personnel and Guidance Association, the National Education Association, the National Association of Chiropodists, and the American Pharmaceutical Association in developing occupational information material for later publication.

SERVICES TO LIBRARIES

In cooperation with the State library agencies, the Office of Education made a nationwide survey of the structure and control of publicly supported library services at the State level. The basis of the study was an analysis of the State laws as of January 1, 1956, supplemented by fundamental information from political science, educational administration, and library science.

The Office also provided library data and consultive services to the Coordinating Committee on the Revision of Public Library Standards of the American Library Association. This undertaking should result in extended and better public library service for the people of the United States since the new standards emphasize the performance of libraries rather than per capita costs and quality of service rather than quantity. The committee foresees a network of public library services which will reach every person in the United States. These services will be found at the community outlets in village, town, and rural areas, backed up by the large central library of city or county, and with the State library at the apex of the cooperative system. Larger units of library administration are called for in the interest of economy and efficiency of operation.

VOCATIONAL EDUCATION

In fiscal year 1956 the Office of Education administered grant-in-aid programs providing more than \$33 million for vocational education in the States and Territories under the Smith-Hughes, George-Barden, and supplementary acts. This total is an increase over the amount available in 1955. Most of the increase, \$2½ million provided under the George-Barden Act, was used to extend vocational education to communities that had not previously had programs. Table 3, column 4, page 195, shows the distribution of funds for vocational education, by States, in fiscal year 1956.

The Office of Education issues an annual digest of the statistical and financial reports made by the State boards of vocational education to the Office covering the program provided for by the Smith-Hughes and George-Barden Acts. The digest of State reports, which shows expenditures made and work done in vocational education for the previous year ending June 30, is ordinarily available in March of the succeeding year. The digest of State reports for fiscal 1956 is in preparation.

The Office continued its cooperative working relationships with the States in the further development and improvement of vocational education. Federal-State attention focused principally on means of alleviating the teacher shortage, on the preparation of teachers; improvement of supervisory practices; and on making instruction more effective. Two phases of program development were of particular concern to the Office: The contribution that vocational education can make to the solution of special problems of low-income families; and the significance of technological, economic, and social changes to vocational training.

A revision of the Statement of Policies for the Administration of Vocational Education based on experience and interpretations of the current acts and policies was undertaken during 1956, and a preliminary draft was submitted to State officials for review. The policy statement will also be reviewed by a special committee of State directors of vocational education and executive officers of State boards for vocational education before it is approved by the Commissioner of Education.

Program specialists in agriculture, distributive occupations, home economics, and trade and industry made official visits to the States to review vocational problems and assist with the solution of problems as requested.

During the year consultants were invited to work with staff members on a number of studies designed to improve vocational education. The studies dealt with the training needs of persons employed in outside selling; problems of small businesses, and the training needs of

employers and managers of such enterprises (distributive education); related instruction and supervisory training in trade and industrial education; and agricultural education for out-of-school young farmers. Published reports of these studies are intended to improve school offerings and to expand vocational education services.

Continued emphasis was given to the professional improvement of administrative and supervisory personnel and to the emerging problem areas in the States in regional conferences for State personnel. Separate conferences were conducted for workers in agricultural, distributive, home economics, and trade and industrial education. Through discussion of questions relating to the operation, expansion, and improvement of the program these conferences developed a continuing awareness among leaders of responsibilities and improved practices in program supervision and administration.

Recognizing the need for trained workers for the rapidly growing labor force in distributive occupations and the contribution that vocational education can make in preparing people for these occupations, many groups and individuals sought information about the Federal-State program of distributive education. As a result of this increased interest and the desire of business to cooperate in expanding and developing this program, program specialists in distributive education worked with trade and business groups and individuals concerned with the business of distribution. A 3-day teacher-training clinic in textile fibers for teachers-coordinators in distributive education was conducted in the Central region.

Staff specialists in home economics education worked individually and in conferences with teachers, supervising teachers, teacher trainers, city and State supervisors, and teacher training institutions on means of increasing the supply of home economics teachers, of helping former teachers who return to the field, on improving student-teacher experiences, and on other ways of strengthening the program.

Specialist in home economics education met with a representative group of college teachers of foods and nutrition and administrators to consider means of strengthening and improving the teaching of foods and nutrition. This was a followup of a conference of this same group held the previous year. Followup conferences were also held in the several regions for college teachers in foods and nutrition to consider course offerings in foods and nutrition in relation to the changes in problems of family living and in the production and distribution of foods, and the significance of these changes to food and nutrition programs and educational procedures.

A report of the project, *Experiences With Infants in the Preparation of Home Economists*, begun in 1955 was issued jointly by the Home Economics Education Branch and the Children's Bureau. The

report represents a first step toward better understanding of common problems in the preparation of professional workers who offer services to children and their families.

To provide training for potential leaders and give participants an opportunity to identify and evaluate basic concepts of leadership, the Office organized a Leadership Training Conference in Trade and Industrial Education which was attended by more than 60 persons from the States, Puerto Rico, Hawaii, the Virgin Islands, and Alaska. A report of the conference was distributed to the States.

A group of persons engaged in trade and industrial supervisory development programs were brought together by the Office to study means of developing supervisory personnel. The findings of the group on the nature and structure of successful programs should be helpful to others in solving similar problems. A report of the conference was distributed to the States.

A systematic followup of the work conference on "Research and Studies in Trade and Industrial Education" was made to collect data on research in trade and industrial education. A report "Research and Studies in Trade and Industrial Education" was developed to assist the States in research essential to developing programs of trade and industrial education capable of keeping pace with technological advances in our continually expanding economy.

Since farming is becoming more highly mechanized, the farmer needs to have special training in the operation and maintenance of his equipment. Instruction in this important area was given special attention in departments of vocational agriculture. Members of the agricultural education staff during the year assisted States in planning and conducting special workshops for teachers of agriculture to assist them in the further development and improvement of the instruction in farm mechanics that is offered in local schools.

HIGHER EDUCATION

Research

Five research studies in higher education were carried on during the year: (1) The costs incurred by students in attending college; (2) the extent and causes of the withdrawal of students from college before completing their programs of studies; (3) the status of planning in the area of college and university facilities; (4) staffing the Nation's schools; and (5) student financial assistance.

The study of what it costs students to attend college was based on the expenditures of 15,500 students in 110 colleges and universities. The study of student attrition was based on the experiences of 13,000 students who entered the freshman class in 1950 in 147 institutions. Reports on these studies will be published in fiscal year 1957.

Three of the projects were initiated in fiscal year 1956 as a part of the expanding research program of the Office. The study of college and university facilities sought answers to three major questions: (1) What are the extent and the character of the additional enrollment that can be accommodated with existing facilities? (2) what facilities have been constructed within the past 5 years and how were they financed? and (3) what additional facilities are planned for construction before 1970? All colleges and universities listed in the Higher Education Directory were asked to respond to the questions. The project is scheduled for completion in fiscal year 1957.

A pilot project was undertaken to explore appropriate research targets and techniques to be employed in studies of problems relating to the staffing of the Nation's schools and colleges. The project developed plans in anticipation of a major research effort to study the teacher personnel of the Nation, and it also developed and tried out procedures and instruments to be used in such a research effort. Further activity in this area will depend on the future development of the extended research program of the Office.

The student financial assistance project is concerned primarily with institutional assistance resources and their utilization. The study also deals with such topics as sources of funds for undergraduate scholarships and graduate fellowships, size of grants, distribution of graduate fellowships by fields of study, availability and use of student loans, loan fund practices, student employment, and the relationships between the size of scholarship grants, tuition fees and living costs, and the number of students who received grants. This study will also provide the basic materials for new directories of undergraduate scholarships and graduate fellowships and for a comprehensive study of student assistance. The results of the study will be of interest and value to many groups interested in higher education, such as college administrative officers, business groups, State and Federal officers interested in scholarship programs, parents, prospective college students, and high school counselors.

Services and Studies

In addition to instituting and carrying on the research projects in higher education, described under Research, the Office completed and published a comprehensive study of education for the professions. It was the first such report to be issued in the United States since 1900. The Office also reviewed and analyzed the present status of statewide and regional interinstitutional studies of higher education and published the report of the study in the March 1956 issue of the periodical, Higher Education. A new issue of Accredited Higher Institutions was prepared and is scheduled for publication in 1957. The Education Directory, 1955-1956, Part 3, Higher Education, and the periodical, Higher Education, were also published.

The Office gave consultive service to State higher education surveys and planning in Mississippi, Louisiana, Nevada, and Florida, and advisory service to higher education institutes, conferences, and associations in the development of their program and activities.

The Office also discharged its legal responsibility for the annual inspection of Howard University; rendered advisory service to the Department of Justice, Immigration and Naturalization Service, on the approval of schools which foreigners on student visas may attend; advised the Housing and Home Finance Agency on whether applicants for college housing loans met the legal requirement for loans; and added the American Association of Nurse Anesthetists to the Commissioner's list of 30 nationally recognized accrediting agencies and associations which he is required to publish.

Administration of Grants

For the year ending June 30, 1956, the Office administered a total of \$5,051,500 to land-grant colleges and universities. The Office responsibility in this program is to certify that each State and Territory is entitled to receive its share of the annual appropriation and the amount it is entitled to receive. See table 3, column 3, for distribution of funds by States.

INTERNATIONAL EDUCATION

American education has an increasingly important function in international affairs. The Office has received enthusiastic support from the profession in recruiting educators for assignments overseas and in placing and training foreign educators in the United States. It is being requested to cooperate with public and private agencies in an increasing number and variety of international educational activities.

One of the recent developments in international education is a rapidly increasing interest in revising the American curriculum at all levels to introduce Americans to all the peoples of the world, for it is estimated that at any one time between 2 and 3 million Americans are living, working, or traveling abroad, in every country in the world. Our schools and colleges are calling on the Office for help in developing techniques for training Americans to live on this new American frontier.

International Educational Relations

The Office has a statutory responsibility for studying, interpreting, and reporting on developments in education abroad. This is one of the oldest activities of the Office, and today is growing rapidly because of the new importance of education as an instrument of foreign policy, and also because of the new role of the United States as a world leader.

During the year comparative educational research and specialized educational services in the Office provided authoritative information for the public and contributed to the development of international understanding. Stress was laid on research and services which States, groups, or individuals would find difficult, if not impossible to carry out.

Studies were made of education in other countries, including Taiwan and Mexico. Basic work was completed on the first edition of a new International Education Yearbook, entitled "Education for Better Living," to be published in fiscal 1957. Important research was launched on education under Communism, and the manuscript, "Education in the Soviet Union," is now ready for publication. One staff member visited ministries of education in Germany to obtain basic information on a study to be published in 1957. Studies of educational terminology used in the U. S. A., in Haiti, in Brazil, and in Spanish America were prepared. Work in this field sparked the idea for glossaries in the World Survey of Education published by UNESCO. Teaching aids for developing international understanding to meet the increasing demands from schools and libraries in the United States as well as from foreign countries were issued.

University and college registrars, State boards of licensure, the United States Civil Service Commission, and other Federal agencies called upon the Office to evaluate the credentials of 2,828 foreign students. This information was essential to the matriculation of these students in United States universities and colleges.

The Office advised with the Veterans Administration on the applications of some 100 foreign educational institutions for approval to train veterans under the provision of the Veterans Readjustment Assistance Act of 1952 (P. L. 550, 82d Congress).

The Educational Materials Laboratory, which was developed with the cooperation of members of the American Textbook Publishers Institute, added 591 books to its collection as well as pamphlets, bulletins, and materials developed in educational missions of the International Cooperation Administration. During the year the laboratory enabled some 600 visitors to examine representative textbooks and materials used in United States schools. The visitors included foreign embassy staff, other foreign visitors, United States personnel preparing to work in technical assistance programs abroad, and United States educators and laymen.

The Clearinghouse, established at the request of the Department of State, maintains a file of persons entering and leaving the United States under the various Federal Government-sponsored exchange programs. At the end of the fiscal year a total of 36,000 names were

on file, an increase of 15,000 over the 1955 total. The Clearinghouse met requests from the Department of State for approximately 190 statistical tables with these data. In addition, the Clearinghouse began a file of American Dependents Schools abroad containing approximately 1,000 listings.

The Office coordinated the preparation of reports on educational subjects required by United States participation in international organizations. These reports concerned decisions taken by governments with respect to education and provided background data for technical groups at international conferences. Examples of such reports and background data were: "Elementary Education in the United States" for UNESCO's World Survey of Education; "Vocational Training in Agriculture" for the use of the International Labor Conference in preparing an international recommendation on this subject; and "School Inspection (Supervision)" for the UNESCO—International Bureau of Education Conference on Public Education. Office specialists also served on U. S. delegations to international conferences.

Educational Exchange and Training

Under the Teacher Education Program, which the Office conducts in cooperation with the International Educational Exchange Service of the Department of State, Office staff arranged programs for the training of 262 foreign teachers in the methods and techniques of American education. Approximately 80 percent of them were concerned with elementary, secondary, and vocational education, and English as a second language; 20 percent participated in an American civilization project. A workshop was held at the University of Puerto Rico for 47 educators from Caribbean countries.

Under the Teacher Exchange Program school authorities in 46 States, 3 Territories, and the District of Columbia cooperated with the Office in the placement of 502 American and foreign teachers for 506 available teaching opportunities: 156 Americans exchanged jobs with 156 foreigners; 104 Americans were recruited for specific teaching vacancies; 71 Americans attended summer seminars in France, Germany, and Italy; 15 teachers from other lands were assigned to teaching positions in the United States.

The Technical Training Program provided for specific training of teachers and other educators from underdeveloped areas to support educational projects in their own countries. These projects were developed by American technicians to assist cooperating foreign governments in obtaining economic and social progress through improvement of education, health, and agriculture. Cooperating with the International Cooperation Administration, the Office arranged technical training for the academic year for 600 educators from 39 coun-

tries. In this program particular emphasis was placed on practical training and experience.

Educational Missions Abroad

United States Technical Assistance programs were aided by the Office in the recruitment of 85 education specialists for assignments in overseas missions of the International Cooperation Administration. The Office furnished essential technical support to these educators by providing packets of educational publications, appraising lists of instructional materials and equipment, and rendering professional advice on specialized problems.

The staff of the Office participated in on-the-spot surveys of educational programs overseas, took part in international conferences, and consulted with the education officials of many other countries on professional matters of common interest.

SCHOOL ASSISTANCE IN FEDERALLY AFFECTED AREAS

One of the major functions of the Office of Education is the administration of two laws that provide Federal aid to education in districts that have been affected by Federal activity. They are Public Laws 874 and 815, both passed by the Eighty-first Congress in September 1950.

For fiscal year 1956 the Congress appropriated, under Public Law 815, a total of \$33,900,000, which was added to the continuing appropriation, and under Public Law 874, a total of \$90,000,000. Columns 5 and 6, table 3, page 195, show the distribution of funds to States made under both laws during the year.

Public Law 874 authorizes Federal contributions toward the operating costs of public elementary and secondary schools in districts that feel the Federal presence in one or more of these ways: As a loss of revenue through the tax-exempt status of Federal properties; or as added school costs either (1) because of the attendance of children who live on Federal property or whose parents are employed on such property or (2) because of a sudden and substantial increase in school enrollment growing out of Federal-contract activities.

Public Law 815, as amended, authorizes financial assistance for building schools in areas affected by Federal activity, for the construction of temporary schools in certain situations, and for construction of schools on Federal bases where necessary to house school children.

With the completion of the sixth year of Federal assistance to schools in federally affected areas under these two laws the number of school districts participating has increased to 2,860.

Annual payments to federally affected districts to aid in meeting current operating expenses for the fiscal year amounted to approximately \$86 million. Payments were made on behalf of some 980,000 federally connected pupils claimed by school districts which had a total attendance of about 6,200,000 students. The affected districts educate approximately one-fifth of all the Nation's public school children.

The number of school construction projects which had been approved by the close of fiscal year 1956 had passed the 3,000 mark. A total of \$609 million in Federal funds had been allocated to some 3,100 school construction projects approved by June 30. These funds together with approximately \$260 million in local funds which had been added to the projects will be sufficient to house some 700,000 schoolchildren.

In the spring of the year the President made recommendations to the Congress for an extension of the program for school construction in federally affected areas. This extension in time was made essential principally by the substantial program of military housing which had been enacted by the Congress and which will create a demand for additional classroom space in federally affected areas.

A separate report was made to the Congress, as required by law, covering the administration of this program and providing detailed information on receipts and disbursements of Federal funds, school districts participating, and other phases of operation.

Major Publications Off the Press in Fiscal Year 1956

Clerical and Custodial Staff in Public Secondary Day Schools
Course Offerings in Guidance

Current Expenditures per Pupil in Public School Systems—Large Cities, 1954–55

Current Expenditures per Pupil in Public School Systems—Small and Medium-Sized Cities, 1954–55

Digest of Reports of State Boards of Vocational Education

Earned Degrees Conferred by Higher Educational Institutions, 1954–55

Educational Directory, 1955–56

 Federal Government and States, Part I

 Counties and Cities, Part II

 Higher Education, Part III

Education for the Professions

Education in Mexico

Engineering Enrollments and Degrees, 1955

Enrollment (Opening Fall) in Higher Education Institutions, 1955
Enrollment, Teachers, and Schoolhousing—Fall Statistics, 1955—
 Full-Time Public Elementary and Secondary Day Schools
Fifth Annual Report of the Commissioner of Education Concerning
 the Administration of Public Laws 874 and 815, June 30, 1955
Guide for Part-Time Instructors—Distributive Education for Adults
National Leadership Development Conference—Trade and Industrial
 Education, 1956
Offerings and Enrollments in Science and Mathematics in the Public
 High Schools
Public Vocational Education Programs—Characteristics of Programs
 Under Provisions of the Federal Vocational Education Acts
Radio and Television Bibliography
Report to the President by the Committee for the White House
 Conference
Resident, Extension, and Adult Education Enrollment in Institutions
 of Higher Education
School Facilities Survey—Report of the Long-Range Planning Phase
Selected References on School Finance
Selection and Training of Part-Time Instructors—Distributive Edu-
 cation for Adults
State Policies and Regulations Affecting Junior High Schools
The State and Publicly Supported Libraries
State School Plan Services
Supervision in Rural Schools—A Report of Beliefs and Practices
Teachers of Children Who Are Deaf
Training for Quantity Food Preparation
Work Experience Laboratories—Distributive Education for Youth
Periodicals
 Higher Education (9 issues, September 1955–May 1956)
 School Life (9 issues, October 1955–June 1956)

Table 1.—School enrollments in the continental United States, 1954–55 and 1955–56

[Office of Education estimates]

School	Year	
	1955–56	1954–55
Kindergarten through Grade 8:		
Public school system	24,588,000	24,091,500
Private and parochial schools	3,768,000	3,506,200
Residential schools for exceptional children	71,500	65,000
Model and practice schools in teacher training institutions	38,500	38,300
Federal schools for Indians	32,200	27,400
Federal schools under Public Law 874	16,000	9,600
Total elementary	28,514,200	27,738,000
Grades 9–12:		
Public school system	6,860,000	6,582,300
Private and parochial schools	823,200	774,800
Residential schools for exceptional children	12,200	11,100
Model and practice schools in teacher training institutions and preparatory departments of colleges	41,000	40,500
Federal schools for Indians	9,800	12,300
Federal schools under Public Law 874	900	1,000
Total secondary	7,747,100	7,422,000
Total elementary and secondary	36,261,300	35,160,000
Higher education:		
Universities, colleges, professional schools, including junior colleges and normal schools	2,996,000	2,755,000
Total higher education	2,996,000	2,755,000
Other schools:		
Private commercial schools (day and evening)	450,000	144,000
Nurse training schools (not affiliated with colleges and universities)	91,400	69,500
Total other schools	541,400	213,500
Grand total	39,798,700	38,128,500

Table 2.—Supply and demand for elementary and secondary public and nonpublic school teachers, 1955–56

Item	Elementary and secondary
<i>Supply</i>	
Total teachers 1954–55 ¹	1,201,800
Less emergency teachers 1954–55	91,200
Total qualified teachers 1954–55	1,110,600
Less 7.5 percent turnover	83,300
Qualified teachers returning for 1955–56	1,027,300
Emergency teachers qualifying for 1955–56	25,000
New supply of qualified teachers (79 percent of elementary and 56 percent of high school teachers trained in 1954–55)	63,400
Total qualified supply 1955–56	1,115,700
<i>Demand</i>	
Total teachers 1954–55	1,201,800
Teachers needed to meet increase in enrollment in 1955–56 ¹	55,200
Total demand 1955–56	1,257,000
Shortage of qualified supply (see note below)	141,300

¹ The number of elementary and secondary school teachers in public schools, in the fall of 1954, was 1,065,803 (Office of Education Circular No. 417, Revised). To this must be added the number in nonpublic schools (private and parochial), in model and practice schools of colleges and universities, in residential schools for exceptional children, and in schools operated under Federal auspices. The number of teachers in this group of schools was estimated as 136,000, on the basis of 1 teacher to every 33 pupils—the ratio prevailing in the Roman Catholic schools which enroll 88 percent of the pupils in this group.

Table 3.—Grants to States: Office of Education, fiscal year 1956¹

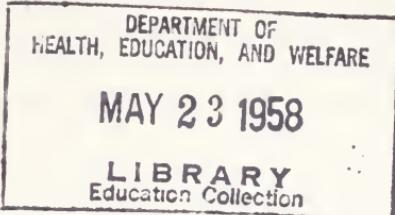
States, or Territories and possessions	Total	Colleges of agriculture and the mechanic arts	Cooperative vocational education	School construction (P. L. 815)	Maintenance and operation of schools (P. L. 874)
Total	\$208,633,750	\$5,051,500	\$33,199,226	\$89,176,815	\$81,206,209
Alabama	4,441,564	100,541	898,437	2,424,208	1,018,378
Arizona	2,659,106	77,477	180,844	1,494,698	906,087
Arkansas	2,575,559	89,048	657,340	1,190,397	638,774
California	30,958,570	175,599	1,620,978	14,817,260	14,344,733
Colorado	4,551,669	83,218	254,221	2,031,178	2,153,052
Connecticut	3,015,738	90,023	315,367	1,413,804	1,196,544
Delaware	373,261	73,173	165,000	92,098	42,990
Florida	4,473,567	97,644	514,850	2,098,100	1,762,973
Georgia	5,727,555	104,360	964,335	2,994,183	1,664,677
Idaho	1,009,966	75,872	187,580	304,253	442,261
Illinois	4,687,295	156,905	1,460,900	1,081,100	1,988,390
Indiana	2,453,746	109,245	871,495	720,916	752,090
Iowa	1,175,270	96,146	741,157	92,793	245,174
Kansas	5,2-9,763	89,006	454,204	1,349,928	3,366,625
Kentucky	2,122,618	99,375	911,771	363,039	748,433
Louisiana	1,223,429	96,769	652,621	92,936	381,103
Maine	1,232,956	79,115	189,789	329,948	634,104
Maryland	10,128,904	93,372	397,919	6,256,533	3,381,030
Massachusetts	2,196,372	116,789	637,654	177,806	1,264,093
Michigan	7,292,818	133,559	1,181,820	5,338,495	638,944
Minnesota	1,615,571	99,751	762,446	634,342	119,032
Mississippi	1,485,190	91,735	826,110	137,195	430,150
Missouri	4,183,467	109,448	929,047	1,981,037	1,163,935
Montana	1,532,877	75,896	189,168	1,019,371	248,442
Nebraska	1,954,905	83,222	379,037	531,019	961,527
Nevada	1,643,914	71,597	141,440	827,537	604,340
New Hampshire	777,843	75,319	160,058	135,199	407,237
New Jersey	2,690,191	118,233	643,742	504,546	1,419,670
New Mexico	6,266,140	76,795	189,715	4,569,459	1,430,141
New York	5,717,475	217,934	2,070,072	1,257,018	2,172,451
North Carolina	2,5-4,204	110,518	1,28*,053	681,809	503,824
North Dakota	553,882	76,181	256,940	27,691	193,070
Ohio	7,545,160	149,269	1,477,593	2,788,373	3,129,925
Oklahoma	8,215,876	92,278	582,057	4,394,929	3,146,612
Oregon	1,17*,618	85,176	344,590	116,378	632,474
Pennsylvania	3,477,117	174,720	1,807,730	185,714	1,308,953
Rhode Island	1,313,625	77,899	126,458	323,508	785,760
South Carolina	2,194,223	91,118	656,029	592,384	854,692
South Dakota	1,744,954	76,511	253,114	587,185	825,144
Tennessee	3,198,899	102,835	958,503	1,075,163	1,062,398
Texas	12,954,224	146,921	1,671,308	5,913,353	5,222,642
Utah	2,152,490	76,871	172,225	1,157,355	746,008
Vermont	279,944	73,768	164,761		41,415
Virginia	16,392,764	103,104	857,026	8,410,911	7,021,723
Washington	7,937,557	93,731	474,773	3,265,362	4,103,601
West Virginia	804,1-0	90,006	546,818	91,505	79,851
Wisconsin	1,420,260	104,260	819,313	157,772	338,915
Wyoming	784,313	72,898	159,443	287,586	264,386
District of Columbia	106,999		106,999		
Alaska	4,015,213	71,283	43,378	741,162	3,162,390
Hawaii	3,520,764	74,986	166,202	2,031,670	1,247,906
Puerto Rico	751,456	50,000	618,907	82,549	
Virgin Islands	37,829		37,773		

¹ On a checks-issued basis. Does not necessarily agree with allotments or expenditures for a given fiscal year.

² Does not include \$7,525,000 paid to Housing and Home Finance Agency.

³ Does not include \$735,255 paid to Air Force, \$2,677,462 to Army, \$11,587 to Commerce, \$4,291 to Interior, \$831,254 to Navy, and \$6,767 to Veterans Administration.

Office of Education



Introduction

FISCAL YEAR 1957 was one of healthy growth and activity in American education. Men and women in every phase of life—cultural, social, economic, and industrial—recognized the need for more education. Many demands were made on school officials at all levels. For example, progress in medicine, in dentistry, in industrial arts means changes in educational programs preparing doctors, dentists, and industrial artists. Population growth and mobility, changing occupational patterns, and technological advances mean changes in educational patterns as well as increased facilities. As the spotlight focused on the schools, educators went to work to solve their problems.

A few facts will indicate the size of these problems.

Schools and colleges in the United States enrolled 41,366,000 students in the 1956-57 school year, an all time peak and an increase of 1,567,300 over enrollment in 1955-56 (see table 1). Public and non-public elementary schools—kindergarten through grade 8—enrolled 29,711,000 children, an increase of 1,196,800; secondary schools—grades 9 through 12—enrolled 7,820,000, an increase of 72,900; colleges and universities, 3,244,000, an increase of 248,000. In all other types of schools—private commercial, day and evening, nurse training schools not affiliated with colleges and universities—enrollment increased from 541,400 to 591,000.

In the fall of 1956, 94 percent of all children in the 5- to 13-year-old age group were in school, and 88.2 percent of those in the 14- to 17-year-old group as compared to 80.1 percent 10 years ago.

Of the total enrollment, 5,133,000 pupils were in private elementary and secondary schools, an increase of 5 percent over the preceding

year. In recent years enrollment in private schools has increased more rapidly than in public schools.

The classroom shortage in public elementary and secondary schools, which had been accumulating over a period of years, continued in 1957.

In the school year 1956-57 public elementary and secondary school enrollment exceeded normal capacity by about 2.3 million children. Of this number about 840,000 pupils were on half-day schedules, and the others were in overcrowded classrooms or in makeshift facilities not designed for school work. The number in excess of normal capacity represents the number of pupils that cannot be accommodated without double sessions in the instruction rooms of the publicly owned school plant in use, according to State standards of normal capacity.

Pupils were housed in 1,087,000 instructional rooms, which was 49,000 or 4.7 percent more than the number available in 1955-56. State departments of education reported that in 1956-57 an additional 159,000 instruction rooms were needed in the continental United States, 80,000 of them to accommodate the 2.3 million pupils in excess of normal capacity and 79,000 to replace those in unsatisfactory conditions. A total of 69,200 instruction rooms in public schools were scheduled for completion during the year.

The shortage of qualified elementary and secondary teachers in public and nonpublic schools was a little less severe than it was a year ago—120,700 as compared to 141,300 in 1955-56 (see table 2). Of the total 1.2 million teachers in the public school system in the fall of 1956, 89,400 or 1 in every 13 were emergency teachers—that is they did not meet the State's standards for the lowest teaching certificate. State departments reported that full-time teachers holding emergency certificates constituted 7.5 percent of the total teaching staff in public elementary and secondary schools as compared with 6.8 percent the year before. The increase in the proportion of emergency teachers was caused in part by the adoption of higher certification requirements in some States.

Turnover among teachers was high—about 7.5 percent of the qualified teachers. Turnover, as used here, included those who died and those who left the classroom because of death, retirement, marriage, or to work in another field. It does not include teachers who moved from one teaching job to another.

The Office estimates that when public and nonpublic schools open in the fall of 1957, there will be a shortage of 135,000 qualified elementary and high school teachers—55,000 teachers will be needed to meet the enrollment increase; 12,600 to make up the difference between the 94,000 leaving the profession and the 81,400 new teachers who completed their college training in 1956-57; and 67,400 to replace the

emergency teachers employed last year (22,000 of last year's 89,400 emergency teachers will have become qualified before school opens). In 1956-57 the shortage of qualified teachers was met by the employment of emergency teachers and further overcrowding of classrooms.

The National Education Association reports that in 1956-57 more than half of all teachers were women in elementary grades, and 40.1 percent of all teachers were in rural districts; that in general the level of preparation was higher in urban districts than in rural, in secondary schools than in elementary, and among men than women. Only a few teachers were paid less than \$2,000 a year or more than \$7,000; the average was \$4,220.

The cost of education was high. For education in public elementary and secondary schools, including capital outlay, the country spent about \$12 billion. Expenditures per pupil in average daily attendance averaged \$400 for the school year 1956-57. Office of Education reports indicate that about 56 percent of public school funds were provided from local property taxes; 40 percent from State taxes on incomes, sales, and other forms of business activity; and the other 4 percent from the Federal Government.

The growth of education in the States and local communities led to increasing demands for leadership and to increasing requests for service and information from the Office of Education—information on such subjects as curriculum organization, efficient operation and administration, and on methods of expanding educational opportunities at all levels and to persons of varying degrees of ability. With a 65 percent increase in funds and under recently enacted legislation, the Office of Education was able to expand its professional staff and services and to initiate new programs in cooperative research. These services and programs as well as the new programs of grants for library service in rural areas and the extension of vocational education are discussed in more detail in the following pages.

LEGISLATION

Although the number of congressional enactments affecting education was small, the number and variety of bills introduced and considered during the year reflected national interest in education. Bills introduced included proposals for general scholarships and fellowships, veterans' educational benefits, graduate and undergraduate traineeships in specialized fields, assistance for State studies of education beyond the high school, general aid for school construction, aid for federally affected areas, vocational training in the fishing industry, and programs in the fine arts.

A number of proposals for general Federal aid to the States for school construction were made. During the 84th and 85th Con-

gresses the Administration's legislative program included recommendations for the enactment of such legislation. A general school construction aid bill failed to pass the House of Representatives on July 15, 1956. The President, in his State of the Union Message on January 10, 1957, and in a special message to the Congress on the status of education, January 28, 1957, again requested the enactment of such legislation. A general school construction aid bill again was reported to the House in 1957 and debated, but failed to pass.

Among the measures enacted by the Congress during fiscal year 1957, ten in the second session of the 84th Congress are of direct interest to education. They are briefly summarized below.

Public Law 752, approved July 20, 1956, amends the Agricultural Act of 1949, as amended, by further extending the Special School Milk Program to nonprofit nursery schools, child-care centers, settlement houses, summer camps, and similar nonprofit institutions devoted to the care and training of children, whether or not such institutions are caring for underprivileged children on a "public welfare or charitable basis."

Public Law 813, approved July 26, 1956, authorizes appropriations for allotments to the States to assist them in providing for a committee for education beyond the high school and authorizes appropriations for the expenses of the President's Committee on Education Beyond the High School.

Public Law 880 (Social Security Amendments of 1956), approved August 1, 1956, amends the Social Security Act in three ways which concern education. Title II, Section 218 (a) (6), is amended so that employees of State and local governments who desire to come under Old-Age and Survivors Insurance (OASI) may be considered as a separate group for purposes of coverage—at the option of the State and provided that all new employees do come under OASI. The amendment affects Florida, Georgia, New York, North Dakota, Pennsylvania, Tennessee, Wisconsin, and the Territory of Hawaii.

Title II, Section 218 (d) (6), is further amended to permit affected States (Nevada, New Mexico, Oklahoma, Pennsylvania, Texas, Washington, and the Territory of Hawaii) to cover under OASI nonprofessional school employees who are under a teachers' retirement system, and permits them to do so without a referendum and without covering the professional employees who are in a system. Title III, Section 406 (a), is amended by removing the requirement that, in order to receive aid, a needy child between the ages of 16 and 18 be in attendance in a school.

Public Law 881 (Servicemen's and Veterans' Survivor Benefits Act), approved August 1, 1956, provides, among other things, for a continuing—until age 21—dependence and indemnity compensation

for an orphan child who reaches age 18 and is pursuing a course of instruction in an approved educational institution. The bill also provides that, when there is a widow with a child who has attained age 18, when social security survivor benefits are terminated, the child shall be provided with a supplemental veterans administration benefit of \$35 per month while pursuing a course of instruction in an approved educational institution.

Public Law 896, approved August 1, 1956, extends to the Territory of Guam benefits provided under other Federal statutes, including assistance to vocational education, to schools in federally affected areas, and for library services.

Public Law 911, approved August 2, 1956, amends the Vocational Education Act of 1946 to authorize grants not to exceed \$5 million for the fiscal year ending June 30, 1957, and for each of the next 4 fiscal years to States with State plans for extending and improving practical nurse training.

Public Law 922, approved August 2, 1956, amends the act to promote the education of the blind (Act of March 3, 1879, as amended), so as to authorize wider distribution of instructional materials and to increase the amount authorized to be appropriated for this purpose from \$250,000 to \$400,000.

Public Law 949, approved August 3, 1956, extends until June 30, 1958, the programs under Public Laws 815 and 874 of the 81st Congress, as amended, which provide for Federal financial assistance in constructing and operating schools in areas affected by Federal activities; and makes certain technical changes in the provisions of these laws.

Public Law 1020, approved August 7, 1956, amends and extends the National Housing Act, increasing the amount of college housing loans authorized to be outstanding at any one time, from \$500 million to \$750 million.

Public Law 1027, approved August 8, 1956, amends the Vocational Education Act by authorizing the appropriation of \$375,000 for vocational education in the fishery trades and industry, and distributive occupations therein, to be administered by the United States Commissioner of Education in consultation with the Secretary of the Interior. The Secretary of the Interior is authorized to make grants to public and nonprofit private universities and colleges to promote the education and training of professionally trained persons needed in commercial fishing, and an appropriation not to exceed \$550,000 for each fiscal year is authorized for this purpose.

During the year the Office of Education continued to develop its services in the collection and interchange of information in the field of school law. A principal objective is to develop and maintain a

clearinghouse of information on the status of, and trends in, school law developments in the States and to service the requests of State and local school officials and organized groups on such developments. Two basic reports on the provisions of State school law governing special education of exceptional children and early elementary education were compiled and published. General information on State and Federal educational legislation was also collected and made available to the public.

Organization and Administration of Education

STATE SCHOOL ADMINISTRATION

Through the development and distribution of information on various aspects of State school administration and through consultive services to State departments of education, legislative committees, special committees, and other agencies, the Office of Education continued to assist States in their efforts to achieve more effective programs of State school administration.

During the year, the Office published as a handbook the results of the financial accounting study completed in fiscal 1956. Entitled, *Financial Accounting for Local and State School Systems*, the handbook was officially approved by leading national educational associations who cooperated in its development as the basic guide for financial accounting for local and State school systems throughout the country. By the end of the fiscal year a number of States had already started to incorporate the handbook's recommendations into their accounting systems. This handbook is the second in a basic educational records and reports series aimed at laying the groundwork for comparable educational information among States and communities. With such groundwork established, it will be possible to have available adequate and reliable educational information for local, State, and national spheres of activity.

The year saw the substantial beginning of a project on property accounting for local and State school systems. Aimed at standardizing the meanings of basic items of information and terminology relating to school lands, buildings, and equipment, the project is being conducted in cooperation with the American Association of School Administrators, the Association of School Business Officials of the United States and Canada, the Council of Chief State School Officers, the National Council on Schoolhouse Construction, and the National School Boards Association. Hundreds of representatives of the cooperating associations from all parts of the country will participate, through national and regional conferences, in the production of the third handbook in the series. In this way, the handbook will reflect the needs and wishes of a broad representative sample of its prospec-

tive users with respect to the kinds and the meanings of basic information about school property that should be available.

LOCAL SCHOOL ADMINISTRATION

Efforts to secure more soundly organized local school districts continued with marked success in some States but with many others either attempting to launch new districting programs or to improve the effectiveness of those already in operation. To assist the States with this widespread problem, the Office of Education completed a study dealing with the conditions which facilitate and those which hinder progress. To help local communities engaged in redistricting activities, Office specialists developed a manual of planning procedures which is scheduled for publication in fiscal year 1958.

Another problem directly related to sound district organization is that of determining the nature and scope of services beyond regular classroom instruction and activities a school system can provide at reasonable cost. These are the administrative, supervisory, and other systemwide services needed to provide good conditions for teaching and learning in the classroom and for overall efficiency of the school system. In fiscal year 1957 a special Office project was initiated dealing with this problem.

During the year the Office cooperated with State and national organizations engaged in serving local boards of education and completed a study of State statutory provisions governing membership on local school boards.

SCHOOL FINANCE

The Office continued its services to States and local communities which have problems in supporting schools. Throughout the Nation there was continued difficulty in securing reasonably adequate tax revenues for schools. During the past year the financing problems were intensified by increases in enrollments, public demands for additional services, and rising costs which required greater expenditures. To aid the schools in solving such problems the Office published studies reporting and interpreting information on status, trends, and developments in school finance and school business management.

The Office also gave consideration to the requirements of State legislatures and State departments of education in developing improved plans for financing the schools. Among such new plans are those which propose (1) enactments of foundation programs for supporting schools, (2) allocations of State funds for public 2-year colleges, (3) authorizations of local nonproperty taxes as additional sources of school revenue, (4) appropriations of State funds to help

local school districts construct additional classrooms, and (5) the easing of restrictions on the creation of debt to permit local districts to borrow funds for the construction of new school buildings.

SCHOOLHOUSING

Since 1950 the schoolhousing program has become big business. During the first 7 years of the decade a total of \$13½ billion was spent to provide schoolhousing for an enrollment increase of 7½ million public elementary and secondary students, for rehousing those who moved to new localities, and for replacement of some old buildings. This total expenditure represented an average capital outlay investment of approximately \$36,000 per classroom with related facilities. The number of children born each year continued to increase; building deterioration, pupil mobility, and other factors helped create new housing demands. The recent nationwide school facilities survey gave impetus to the drive for adequate schoolhousing and provided the States with preliminary data for long-range school-plant programs.

In 1957 the Office of Education provided leadership and encouragement to help expand and improve State department of education services and guidance for local school-plant programs. Various State departments established new or expanded existing school-plant service units. Some States increased State financial assistance for local school-plant construction. Office specialists in school housing participated in numerous State or regional conferences or workshops organized to provide data on the development and maintenance of efficient and economical school-plant programs.

Providing adequate schoolhousing for modern educational programs requires careful functional planning and designing with specific attention to space and facility arrangements best adapted to the program to be offered. The schoolhousing specialists cooperated with various national organizations in developing planning criteria and assisted State department of education and local school officials through publications, conferences, and advice in developing techniques and procedures for studying program needs and for developing plant layouts best adapted to facilitate the educational program. They also assisted in establishing criteria and procedures for local cooperative planning.

Substantial progress was made in developing essential criteria to be used in manufacturing and selecting the school furniture and equipment needed in carrying out effective educational programs. Data on pupil body measurements were being used extensively as guides for architectural and other designers of buildings and particularly for designers of school furniture and equipment. The present

trend in planning school buildings is to develop school facility arrangements, furniture, and equipment which are adapted to the ages and sizes of pupils using them and to the learning activities of the pupils. Such features as working heights and spacing, the needs of left-handed pupils, and the dimensional spacing and heights desirable for certain types of physically handicapped children are all considered. Designers and manufacturers are making extensive use of such data, and during the year they requested the advice and services of the Office in applying them to new design problems.

The completed school plant must be maintained ready for use. The Office provided guidance to the States and local districts in developing maintenance, modernization, rehabilitation, and custodial improvement programs. A 1956 school-plant insurance study stimulated several State, many local district, and some college graduate student studies on school building insurance. Many State and city school officials established custodial training programs along lines suggested by the Office to improve school custodial services.

Schoolhousing specialists serve in a liaison capacity between the field of building and equipment technology and school officials. The Office is constantly engaged in various studies in cooperation with technological organizations having a bearing on school-plant construction and efficiency. One study under way is to establish new standards for school lighting to replace those developed in 1948; and another to establish a standard pattern for measuring of floor areas in school buildings. These measurements are to serve as bases for computing and comparing school building space allotments and unit costs.

Services to Local Schools

ELEMENTARY EDUCATION

In recent years the States have intensified their efforts to provide adequately for the education of young children in the public schools. They have expanded services, widened age ranges, increased their requirements for teacher certification, and made an effort to extend educational opportunity to all groups at varying levels of ability. Greater activity at the State and local level has led to greater need for Office of Education information and services. The activities described below will give an indication of the type of services the Office rendered to elementary education in 1957.

During the year specialists in elementary education completed a number of studies: 1) On improved methods of reporting to parents on pupils' progress; 2) on teacher recruitment and retention, showing what State groups have done in the recruitment and selection of teachers and what some schools have done to promote teacher profes-

sional development; 3) on conservation practices in elementary schools; and 4) on the status of physical education in elementary schools in the United States.

The Office continued its efforts to improve educational opportunities for children of migrant agricultural workers. Through representation on the Working Group of the President's Committee on Migratory Labor, the Office cooperated with other agencies and Departments in studying the relation of education to the problems of transportation, housing, and health—problems which the Committee dealt with during the year. The Office initiated a study to make a census of migrant children attending school; it will be completed in 1958. The Office also organized and participated in two regional conferences on the education of migrant children, one in Kalamazoo, Mich., for the North Central States, the other in Santa Fe, N. Mex., for the Southwest States. Throughout the year staff specialists consulted with private and public agencies working on migrant education projects, such as the planning of summer schools for migrant children, teacher education workshops for teachers of migrant children, and preparation of printed materials on the education of migrant children.

Significant proposals for elementary education resulted from two conferences held in the Office of Education. About 60 persons from 50 large cities attended a conference for supervisors of elementary education in large cities. One proposal was that children and parents be invited to participate along with professional educators in developing good programs of instruction and that schools should help children become selective in what they learn through greater emphasis on critical and creative thinking and problem solving.

A second conference was concerned with the role of special teachers of art, music, and physical education in the elementary school. Specialists in these fields and in general elementary education attended.

SECONDARY EDUCATION

In general, the school year 1956-57 reflected increased emphasis by educators and citizens on improving the quality of curriculum content and instruction in secondary schools and at the same time on devising methods of school organization and teaching appropriate to the individual differences of adolescent youth.

Specialists for mathematics and science continued to devote attention to the completion of basic studies of the quantitative and qualitative status of mathematics and science instruction. A pilot study of the qualifications and teaching loads of mathematics and science teachers was conducted in three States. The study pattern developed was adopted by other States working to improve their programs.

The 1954 study of mathematics and science offerings and enrollments was repeated, and analytical comparisons were made. Results show continued increase in the availability of courses in high school and increase in enrollments.

Staff specialists, in cooperation with those of other Government agencies, reviewed studies of the growing national need for foreign language competence in Government, business, industry, and education. A conference attended by school administrators, supervisors, teachers, and teacher-educators was held which identified problems and the need for modernizing and extending foreign language instruction to more pupils for longer sequences of time.

A study of research findings, administrative and organization patterns, and instructional materials for developmental and remedial reading programs in junior high schools was completed. Another study was released which analyzed the various types of cooperative school-community work experience education programs in secondary schools. Suggestions useful to school administrators in initiating and conducting such programs were made.

ADULT EDUCATION

During the year the Office of Education, through one of its staff members, worked with the Adult Education Association in establishing the National Commission on Literacy. The Commission will help develop a national awareness of the problem of adult illiteracy and the importance and urgency of solving the problem. It will also give leadership in attacking the problem.

With the National Education Association the Office developed a cooperative program making the consideration of adult education a part of American Education Week. Heretofore, emphasis during this annual national observance has been on the education of children and youth. From now on educational leaders plan to emphasize lifelong learning as one of the major areas of American education as a means of making adult education an integral part of the regular educational programs.

Another phase of the Office of Education's effort to promote national concern for adult education was the development of an adult education exhibit for the use of teachers, lay leaders of community groups, and others interested in adult education.

Underlying all the Office's plans and activities in adult education are its regular and basic studies in the various areas of adult education. During the year, work was begun on the collection and interpretation of adult education statistics; on studies of activities in State departments of education and local school systems relating to adult education; and on education for the aging.

For the first time questions on the extent to which people participate in adult education activities will be asked in the current population survey of the Bureau of the Census. This survey, planned for October, will cover a sample of 35,000 households in 330 subdivisions of the country and will yield a national estimate of the number of adults who have pursued some educational activity during the past year. Office specialists in adult education, in cooperation with the adult Education Association and the Fund for Adult Education, made the arrangements with the Census and obtained the cooperation of several voluntary agencies in planning the questions and the preliminary instructions for Census enumerators. It is hoped that the experience from the inclusion of these questions in the October Population Survey will be sufficiently satisfactory to warrant the inclusion of similar questions in the 1960 Census.

EXCEPTIONAL CHILDREN

Children whose physical, mental, or emotional qualities differ significantly from the average or normal are called exceptional children. Public interest in the education of exceptional children in the United States continued to mount in 1957. It was focused primarily on children with mental retardation, speech and hearing impairment, and blindness. This interest was evident at Federal, State, and local levels.

In recent years there have been many developments in the education of the mentally retarded. One of national significance is the program of cooperative research in this field which was launched by the Office of Education during the year (See Cooperative research). For the first year in a new program, the variety and coverage of areas for study was extensive. Research projects initiated included studies on trainable and educable children, age groups ranging from preschool to adolescence, day-school and residential-school programs, and urban and rural population.

National interest in developing and improving standards for supervisors and teachers to work with the various types of exceptional children also continued. One of the deterrents to the development of educational programs for handicapped or gifted children has been the shortage of specially prepared and trained teachers for them. For a number of years the Office has given leadership to a nationwide study on this problem, and during fiscal 1957 completed three of the study reports: one on the preparation of teachers of mentally retarded, one on teachers of socially maladjusted children, and the third on speech correctionists.

Plans for the education of blind children in this country seem to be changing somewhat. On the basis of preliminary figures collected by the American Printing House for the Blind, an increased

number of blind children were being educated in day schools in 1957. The ratio of enrollments in residential schools to day schools was about 6 to 4. Together with this shift in philosophy and practice, some changes were made in the Federal act to promote the education of the blind (Public Law 922, 84th Cong., 2d sess.).

AUDIOVISUAL EDUCATION

The Office continued to provide services relating to the audiovisual materials of the Federal Government, including cataloging new films for Library of Congress catalog cards, administering the Government's contract covering the sale of films, and preparing a supplement to the 1955 catalog, "United States Government Films for Public Educational Use." Work was started on the compilation of a catalog of Government maps available for educational use.

As part of its program to strengthen State and local educational resources, the Office prepared directories of audiovisual employees in the Federal Government, State departments of education, and large city school systems; and made a study of audiovisual education in State departments of education. This study showed that the States, while differing in individual practices, were providing a number of services affecting the classroom use of audiovisual instructional materials—through curriculum development, school accreditation, teacher certification, publications, and workshops as well as through the production and distribution of audiovisual materials.

RADIO-TELEVISION SERVICES

The nationwide development of radio and television in education was indicated by the increase in the number of program offerings on commercial and noncommercial stations cooperating with educational institutions, in the large number of courses for credit offered over television, and in the number of stations. Program offerings over noncommercial TV stations increased to a general average of 56 hours a week, and commercial stations made sharp increases in institutional cultural programs. The number of courses for credit increased, particularly where experimental use on a noncredit basis justified the offering. The number of educational radio stations increased from 176 in 1956 to 193 in 1957, and educational television stations from 26 in 1956 to 29 on the air in 1957 and 11 in the construction or planning stages.

Closed-circuit television in schools and on college campuses also showed the results of successful experimentation over the past year. Large cities, such as Los Angeles, Atlanta, Chicago, and New York, maintained closed-circuit as well as open-circuit broadcasting. Smaller cities like Evanston, Ill., Hagerstown, Md., Wichita, Kans.,

and San Jose, Calif., carried on teaching experiments demonstrating the educational possibilities of television.

During the year the Office cooperated with educational institutions and with the Department of Defense, Department of State, the Treasury Department, Department of Commerce, the United States Information Agency, the National Science Foundation, and other Government agencies in planning and producing programs. Staff specialists advised on educational projects in many parts of the United States, under various State auspices, the Commonwealth of Puerto Rico, and a number of foreign countries just starting television.

GUIDANCE AND STUDENT PERSONNEL

During the year the Office prepared and distributed pamphlets, circulars, and leaflets on various occupations for the use of school guidance and student personnel workers. Major publications dealt with such areas as certification requirements for guidance workers including school psychologists, summer and academic year offerings at colleges and universities in the preparation of guidance and student personnel workers, and retention in high schools in large cities. Staff members continued research in evaluation of guidance and student personnel services, characteristics of students and educational programs in schools having low student dropout rates, guidance practices in 260 local schools, and guidance procedures for the selection of students in vocational education.

The Office also carried on a number of activities in cooperation with other agencies and groups, both private and governmental. In one of these—the Stay-in-School Campaign—the Office cooperated with the Departments of Labor and Defense in preparing and distributing press and radio releases and a handbook for the use of communities in urging high school youth to stay in school. A study on the transition from school to work prepared to aid schools, civic clubs, PTA's, and employers in assisting youth as they move from education to employment was the outgrowth of discussions with a subcommittee of the Inter-Departmental Committee on Children and Youth. A study of the retention of students in high schools grew out of a 6-year planning and research program involving 22 large city school systems. A study of careers in atomic energy was made, with technical assistance from the Atomic Energy Commission.

Staff specialists also cooperated with other governmental and professional groups concerned with guidance and personnel.

Vocational Education

One of the functions of the Office of Education is to administer the grant-in-aid funds for vocational education of less than college grade made available under provisions of the Smith-Hughes and

George-Barden and supplementary acts and to assist States in the promotion and improvement of such education.

To carry out the provisions of these acts the Congress appropriated slightly more than \$38 million in matching funds for allotment by the Office to the States in 1957, an increase of about \$5 million over the 1956 total. In 1956 State and local expenditures for vocational education amounted to \$142,705,208. That year more than 65 percent of the high schools in the country offered training in one or more of the vocational programs—agriculture, distributive occupations, home economics, trade and industry, practical nurse education—and approximately 3,500,000 youths and adults were enrolled.

The Federal grant included \$2 million for the extension and improvement of practical nurse training, under legislation enacted by the 84th Congress (Public Law 911), amending the George-Barden Act.

The action of the Congress in providing special funds for practical nurse training stimulated the States to extend such training. By the close of the year 47 States and Territories were participating in the program. The Office assisted the States through intraregional conferences in working out program plans for the growth and development of practical nurse training. Five such conferences were conducted during the year by three professional nurse-educators who had joined the staff to assist with the program.

Policies for the administration of the practical nurse training program under the provisions of Public Law 911 covering the most important points were developed and distributed to the States early in the year. By the end of the fiscal year a full statement of policies for the administration of the program for training practical nurses had been completed.

The 84th Congress also enacted legislation (Public Law 896) entitling Guam to participate in the vocational education program. Other legislation (Public Law 1027) was designed to promote vocational education in the fishery trades and industry and distributive occupations therein. No funds were appropriated for the fiscal year 1957 under either of these acts.

The changing economic and social conditions affecting farming, industry, distribution, and family living emphasize the importance of continual appraisal of vocational programs and adjustments to them to meet the needs of workers, as well as the demand for workers. States report that training is needed for many new industries and for old industries employing new production methods. New and higher skills are needed by workers to meet the job requirements of the present and the future. To help the States improve their program, the Office conducted 17 regional conferences for State personnel in vocational education. Special emphasis was given to

adapting instruction to changing conditions, keeping abreast of technical improvements, meeting the need for preservice and in-service training of teachers and supervisors, providing new areas of training, and developing leadership in vocational education, adult education, and action research.

In carrying out studies and plans for improving the program in specific areas, the Office brought together groups of persons with experience in successful programs or with experience in the areas under consideration. Representative of these were:

(1) A conference on various phases of the practical nurse training program in which 20 persons participated to advise the staff on significant steps in the preparation of plans for programs of practical nursing; to develop criteria for evaluating progress; and to identify studies needed.

(2) A group of 17 home economists who reexamined the program of home economics for adults, considered the development and improvement of these programs, and assisted in preparing basic content materials for a much needed bulletin in this field.

(3) A conference on implications for trade and industrial education of technological change in industry, in which vocational educators from 16 States participated. Special contributions were made by representatives from industry, Government, and other groups concerned with the training of technicians.

To assist the States in developing various phases of the program for which there was an expressed need, the Office rendered service in the following ways: 1) Conducted a second national conference for the development of leadership in trade and industrial education for new and potential State supervisors, with 59 industrial educators from 38 States participating.

2) Organized and conducted, in cooperation with representatives of the textile industry, a series of textile fiber clinics to bring to State and local leaders in distributive education information on recent developments and on sources of teaching materials.

3) Held the first regional conference on farm mechanics for teachers of vocational agriculture, with 11 States participating, to develop functional programs in farm mechanics instruction in keeping with modern mechanized agriculture.

4) Conducted workshops on farm mechanics in a number of States for State staffs in agricultural education.

5) Cosponsored, with a university which offers teacher training in home economics, the first of a series of workshops on improvement in home economics teaching—emphasizing social, economic, and scientific developments as they affect home and family life.

Several projects were undertaken during the year. They included a preliminary investigation into the study and research needed in

vocational education in secondary schools; a study of the importance of business education as a field of training and as a potential source of workers; the development of curriculum materials for quantity food preparation in hotels and restaurants; and management training needs of small business establishments and the contribution that distributive education in secondary schools can make to such training.

The Office reviewed programs in the several States and assisted the States in appraising their administrative practices and at the same time program specialists assisted the States in further developing their programs.

Office specialists participated in teacher-training workshops and in meetings of State supervisory and teacher-training staffs on the improvement of instruction; assisted in State-conducted studies of vocational education; served on committees concerned with curriculum improvement; worked with State staffs and teacher-training institutions on research projects; helped in the preparation of resource materials for use in universities and local school systems; and participated in many of the annual State conventions of vocational educators.

The revision of the *Statement of Policies for the Administration of Vocational Education* (Bulletin No. 1), begun in fiscal year 1956, neared completion by the close of the fiscal year. In this task there has been wide participation by State directors of vocational education, with the final work to be done by a special committee composed of chief State school officers and State directors, working with members of the staff of the Office of Education and the Office of the General Counsel.

Higher Education

The following projects are representative of Office research and consultive services to higher education during fiscal year 1957.

COST OF GOING TO COLLEGE

During the year, the Office completed a study (reported in Bulletin 1957, No. 9, 91 p.) of what a year in college costs undergraduate students and the major source of student budgets. Based on the experience of 15,325 students in 110 colleges in 41 States during the school year 1956-57, the study reports that the estimated cost of attending undergraduate college per school year averaged \$1,500 for publicly controlled colleges and \$2,000 for private and related institutions.

These costs were double those undergraduate students paid in 1940. The family of the average student provided from its current income 41 percent of the student's budget; he earned 26 percent of it; received 20 percent from trust funds and other forms of long-time

family savings; and received the remaining 13 percent from scholarships, loan funds, veterans' benefits, and miscellaneous resources.

STATEWIDE PLANNING AND COORDINATION OF HIGHER EDUCATION

The Office published a roundup on what each of the 48 States is doing in the field of statewide planning and coordination of higher education. The Office provided consultive services on the topic to State executive and legislative councils and to boards of regents in 8 States: Colorado, Florida, Louisiana, Michigan, New Mexico, Nevada, Tennessee, and Wisconsin. Staff specialists also contributed to improved State planning and coordination in higher education through work with the President's Committee on Education Beyond the High School, and through service to the Southern, Western, and New England regional compacts of States for developing higher education.

COLLEGE STUDENT RETENTION AND WITHDRAWAL

During the year, the Office completed a 4-year study of the extent and causes of the retention and withdrawal of college students. It was based on the experience of 13,700 students who first enrolled in college in the fall of 1950. The students attended 147 representative institutions in 46 States and the District of Columbia. The study shows that 40 percent of the freshmen who entered college in 1950 remained to graduate 4 years later and that an additional 20 percent were ultimately graduated. The holding power of colleges indicated by these figures represents a significant improvement over those shown by a study done in 1937.

Among freshmen general dissatisfaction with the instructional and counseling program ranked highest among causes for withdrawal. Academic failure ranked second. For sophomores, juniors, and seniors, personal financial problems ranked highest. The greatest number of dropouts were in the freshman year.

COLLEGE AND UNIVERSITY FACILITIES SURVEY

Preliminary reports from a college and university facilities survey now underway indicate that during the last 5 years the country has spent \$2 billion for new buildings and expects to spend \$4 billion for this purpose during the next 5 years. Approximately 62 percent of new construction in the last 5 years was for publicly supported institutions and 38 percent for private colleges and universities.

Publicly controlled institutions got 56 percent of their construction funds from local, State, and Federal taxes; 31 percent from bond issues; and 13 percent from other sources. During the same period, privately supported institutions got 56 percent of their construction funds from gifts, 20 percent from bond issues and other borrowings,

10 percent from current institutional funds, 8 percent from endowment, 4.5 percent from governmental appropriations, and 1.5 percent from other sources.

SURVEY OF ORGANIZED OCCUPATIONAL CURRICULUMS

The Office of Education, in cooperation with the American Society for Engineering Education, has published detailed statistics on engineering enrollments and degrees since 1949. In 1957, following a request from the President's Committee on Scientists and Engineers, the joint enterprise was extended to cover organized occupational curriculums (both engineering and nonengineering) of less than 4 years' duration in technical institutes, junior colleges, and other higher educational institutes.

Questionnaires covering curriculums of less than 4 years' duration for the academic year 1956-57 were sent to all recognized institutions of higher education. Returns from 95 percent of them show that 639 institutions enrolled 92,430 students in nonengineering curriculums, and 60,242 in engineering-related curriculums; and graduated 23,441 students from nonengineering curriculums and 10,737 from engineering-related curriculums. Publication of complete data early in fiscal year 1958 will make available for the first time information on the extent and type of training at the technician and semiprofessional level.

COLLEGE STAFFING STUDY

There were 301,582 faculty members in American colleges and universities in the fall of 1955. According to Office of Education estimates, college student enrollments will increase from 3,244,000 in 1956-57 to 6,676,000 by 1970-71. Thus, about double the number of present college teachers will be required if the present teacher-student ratio is to be maintained. The already difficult staffing problems are expected to become more serious.

In consideration of these facts the Office, in May 1957, sponsored a conference of representative leaders in higher education to advise on (1) how colleges and universities are now meeting the teacher shortage, and (2) the ability of the American graduate school to prepare a sufficient number of suitably qualified college faculty members to meet the demand. Initial steps were taken in fiscal 1957 on an Office study of these problems.

INSTITUTIONAL FINANCIAL AID TO STUDENTS

Specialists in higher education completed a nationwide survey of institutional financial assistance—excluding student aid grants of the States, corporations and other business firms, labor unions, and other organizations—to undergraduate and graduate students. Although

1,560 colleges and universities reported some type of student aid, 190 others reported that they had no form of financial aid for their students. Preliminary data showed that in the school year 1955-56 institutional aid to undergraduates totaled \$141,985,153, of which 45.9 percent was for employment, 45.2 percent was for scholarships, and 8.9 percent was for loans. Institutional financial aid for graduate students totaled \$64,928,950, of which 54.0 percent was for assistantships, 28.3 percent for fellowships, 10.0 percent for employment, and 7.7 percent for loans.

As a byproduct of its student aid study, the Office completed two directories listing the institutional student aid resources separately for undergraduate and graduate students. These directories will be published early in fiscal year 1958. The Office plans to distribute copies of the directories to all secondary schools and to all institutions of higher education in the United States.

COLLEGE HOUSING PROGRAM

During fiscal 1957, the staff of the Office was requested by the Community Facilities Administration to review and report on the second largest number of loan applications for college housing since the inception of the program. These applications totaled 315, three-fourths of which were from private colleges and 67 percent from institutions with enrollments under 1,000 students. The total amount requested in 1957 by the 315 applicants was \$403,991,000, as contrasted with \$413,250,000 requested by 386 applicants in fiscal 1956.

Amendments to the Housing Act, enacted by the 85th Congress, 1st Session, will increase the college loan fund from \$750 million to \$925 million. The interest rate, now at 2.78 percent, will be about 3 percent for fiscal 1958.

ADMINISTRATION OF GRANTS

For the year ending June 30, 1956, the Office administered a total of \$5,051,500 to land-grant colleges and universities under the Morrill-Nelson and Bankhead-Jones Acts. Office responsibility in this program is to certify that each State and Territory is entitled to receive its share of the annual appropriation and the amount it is entitled to receive. The amounts allotted to the States, Territories, and the Commonwealth of Puerto Rico are shown in table 3.

International Education

Throughout 1957 the Office continued to shape its program to meet the growing interest in international education. As the public becomes increasingly aware of the importance of education to mutual

understanding of the cultures of the world and thus to world peace, there are increasing demands on the Office. In 1957 the Office received many requests for service from Federal, national, and international agencies and from American and foreign educators.

RESEARCH AND STUDIES

President Eisenhower, in a commencement address at Baylor University, Waco, Texas, in 1956, proposed that colleges and universities in the United States cooperate in the development of higher education in countries with inadequate educational facilities. Since that time several appraisals have been made of the status of American higher education abroad; among them was the Office study, *American Cooperation With Higher Education Abroad*, published in 1957. It is a summary of governmental and nongovernmental programs.

In addition to its regular studies of comparative and international education, the Office introduced two new series of publications in 1957: A series of yearbooks on education around the world, and a series of bibliographies. The first yearbook was released under the title *Education for Better Living: The Role of the School in Community Improvement*. It is a survey of what schools are doing in 16 nations and colonial areas to improve community living conditions. The first of the annual series of bibliographies, *Bibliography: 1956 Publications in Comparative and International Education*, was issued as an aid to American professors and leaders in comparative and international education in the United States and abroad.

In 1957 work was begun on three studies which will be published in 1958: (1) Educational developments in Japan since the war, based on a field study by a specialist in Far Eastern education, (2) the educational organizations, institutions, and programs in Brazil, based on a field study by a specialist in Latin American education, and (3) the functions and organizations of ministries of education, to be published as the second yearbook on education around the world. Officials of other United States Government agencies, particularly those with overseas posts, cooperated with Office specialists in planning the study of ministries of education and in securing data for it.

FAR EAST UNIT

A Far East unit was established in the Office in 1957 to handle the increasing workload relating to education in Asian countries. The unit was organized after staff specialists had conferred with representatives of the Government and educators outside the Office on the direction educational research on the Far East should take to serve the needs of the Government and the profession.

EVALUATION OF FOREIGN CREDENTIALS

The number of foreign nationals studying in the United States has risen steadily since World War II, to at least 40,000 in 1957. The increase in foreign students studying in the United States and of United States students studying abroad adds to the work of the staff members who evaluate foreign study for the use of educational institutions, State certification offices, boards of licensure, civil service commissions, and personnel offices in making decisions on the equivalence of specific foreign study to study in the United States.

In 1957, two trends were evident in requests for evaluation: A higher proportion of the requests were from governmental boards of licensure, probably reflecting a larger number of mature persons coming here with the intention of practicing a profession; and a larger number of requests were for information about the status of foreign universities from government agencies with responsibility for United States citizens studying in higher institutions overseas.

EDUCATIONAL CLEARINGHOUSE

The Office provided the Department of State with 183 statistical tabulations on government-sponsored grantees entering and leaving this country during the year, a service it has given annually since 1952. The statistical studies include such information as numbers and types of grantees by country of destination or origin, State of origin or destination, fields of specialization, age groupings, and veterans' status.

During the year, the Office prepared records giving the name, address, category, specialty, occupation, and institution of placement of every foreign grantee entering this country between 1952 and 1955.

INTERNATIONAL CONFERENCES

The Office coordinated the preparation of educational reports required for United States participation in international organizations. These reports dealt with decisions of governments on education and provided background data for technical groups at international conferences.

For example, a report on the training of primary (elementary) teacher training staffs was prepared for the Twentieth Annual International Conference on Public Education at Geneva; and in response to requests from UNESCO, materials were assembled on special education in the United States for the Belgian Ministry of Education and on vocational and technical education for the Netherlands Ministry of Education.

On the recommendation of the United States delegations to the International Conference on Public Education, sponsored by UNESCO and the International Bureau of Education, the Office of Education,

in cooperation with the United States Information Agency, prepared an exhibit for display in the Palais Wilson in Geneva from July 1957 to June 1958. The exhibit is on school construction, the major subject of the 1957 conference.

EDUCATIONAL MATERIALS LABORATORY

The Educational Materials Laboratory has been in operation since 1953 for the use of foreign visitors, United States educators, and other persons interested in improved educational materials. In 1957 the Laboratory had a collection of approximately 6,000 items including textbooks supplied by the American publishers and materials developed by United States education missions in foreign countries.

During 1957 the Laboratory served other government agencies; educators from other countries, most of whom were brought to the United States by the International Cooperation Administration and the International Educational Exchange Service of the Department of State; American educators going abroad under the technical assistance program of ICA or to administer American sponsored schools in other countries; and a number of ICA missions overseas. A majority of the ICA requests were for assistance in obtaining materials in American educational specialties and for technical advice on establishment of education materials centers in several missions.

Service to American schools continued to be a major part of the Laboratory's activities. In 1957, 1,166 individual requests were received from 47 States, 2 Territories, the District of Columbia, and Guam. Most of them were for assistance in planning courses and in locating materials from other countries. A series of "Teaching Aids for Developing International Understanding," which include annotated lists of teaching materials, was initiated for use by American teachers. Thirteen such lists were compiled.

TEACHER EXCHANGE PROGRAM

The continued exchange of American and foreign teachers results in an effective interpretation of educational systems and cultures to participating groups in the United States and abroad. To further this aim the Office cooperates with the IES, Department of State, in recruiting American teachers for overseas assignments and matching American and foreign teachers for interchange of positions. During the year 25 new teaching opportunities overseas were announced.

In 1957 the Office placed 502 American and foreign teachers, including 71 American teachers for summer seminars in France, Germany, and Italy; 104 Americans for teaching assignments abroad and 15 foreign teachers for similar assignments in the United States; and 156 American and 156 foreign teachers who exchanged positions.

TEACHER EDUCATION PROGRAM

The teacher education program in which foreign teachers are brought to the United States for a 6-month study of American education has reached into many American communities. The 303 teachers from 43 countries here under this program during the past year visited more than 6,000 schools and homes in 1,100 communities and met over a million people. They appeared on radio and television programs and were the subject of newspaper articles in at least 37 States. Study programs were arranged for them in 12 university training centers in elementary, secondary, and vocational education, English, and American civilization.

The following countries participated for the first time during the past year: Chile, Colombia, Ecuador, Fiji Islands, Honduras, Jordan, Laos, Malta, Turkey.

The second teacher development workshop was held at the University of Puerto Rico for 32 educators from countries of the Caribbean area. The 30-day program in elementary and secondary education was conducted in Spanish. This program is also carried on in co-operation with IES, Department of State.

TECHNICAL TRAINING PROGRAM

During the year the Office assisted the International Cooperation Administration by arranging training programs for 540 participants from newly developing countries. The participants received their academic training in 130 educational institutions in a wide variety of subjects such as elementary, secondary, and vocational education; engineering; and physics; and supplementary training in different types of commercial and industrial installations. As part of their training the participants visited unions, PTA's, civic groups, granges, and hundreds of other organizations.

TECHNICAL COOPERATION PROGRAM

The Office continued to work with the ICA in the development of technical cooperation programs in 37 newly developing countries. Eighty-seven specialists were selected for appointment by ICA to serve in educational programs of these countries where approximately 300 educators, exclusive of college contract employees, are helping to improve educational conditions.

The Office also furnished essential technical support on special educational problems of these educators in the countries where they work, participated in international conferences, and consulted with education officials of many other countries on professional matters of common concern.

NONPROGRAM VISITORS

The Office also serves large numbers of foreign visitors who are not participants in any one of the three programs for which funds have

been transferred to the Office. Some of these "nonprogram" visitors make appointments directly with staff members in all divisions of the Office. A number of visitors are referred by other Government agencies, educational organizations, and foreign embassies for assistance in educational matters. It is estimated that during the year 350 non-program foreign educators received educational services from the Office. These activities are a traditional service of the Office.

Research and Statistical Services

COOPERATIVE RESEARCH

In 1957 the Office launched the cooperative research program, which is authorized under Public Law 531, 83d Congress. The act authorizes the United States Commissioner of Education to "enter into contracts or jointly financed cooperative arrangements with universities and colleges and State educational agencies for the conduct of research, surveys, and demonstrations in the field of education." An appropriation of \$1,020,190 was made for the support of such research during fiscal year 1957.

Proposals under the program are received by the Office from institutions of higher education and State departments of education. All such proposals are submitted to the Research Advisory Committee for their review and recommendations. This Committee ordinarily meets three times each year, in October, January, and May.

The Committee evaluates the proposed projects on the basis of the following criteria: (1) Significance of the project for education throughout the Nation; (2) soundness of technical design of the study; (3) personnel and facilities available to carry out the project; and (4) economic efficiency (economy of the proposed procedures and expected value of findings in relation to Federal cost). Projects considered outstanding are recommended by the Committee to the Commissioner of Education. When projects are approved by the Commissioner, contracts are negotiated for their support. Although a substantial amount of the necessary financial support is provided by the Federal Government, the cooperating institution or agency also contributes to the total cost of the project.

By the end of fiscal year 1957 the Office had received 324 applications for the support of research proposals representing requests for Federal funds of more than \$15 million. Of these, the Research Advisory Committee had reviewed 316 proposals and had recommended 108 of the projects for final approval.

Since two-thirds of the total amount of Federal funds appropriated was designated for research in the education of mentally retarded children, more proposals were received dealing with this subject than with any other. At the end of the fiscal year a total of 72 projects had

been initiated and were receiving financial support under the Cooperative Research Program. These projects received current-year support of approximately \$1 million. Most of the projects will require an additional year or more for completion. Of the 72 projects initiated, 42 deal with the mentally retarded. Of the 30 projects in areas other than the mentally retarded, 10 deal with staffing the Nation's schools and colleges, 6 with the retention and continuation of students in school, 3 with the development of special abilities, 3 with educational aspects of juvenile delinquency, and 8 with other aspects of education. The projects are being carried on in 30 different institutions of higher education and in 6 State departments of education.

STATISTICAL SERVICES

During fiscal year 1957 the research and statistical staff was increased from 26 to 68 persons. As a result, the traditional basic statistical surveys of school systems and institutions have been strengthened, studies of new areas of educational statistics have been initiated, and a new section (the Reference, Estimates, and Projections Section) has been established. The new section will systematize and expand the program of educational estimates and projections in order to provide current data urgently needed for policy-making purposes. Study has already begun for projections of enrollment at elementary, secondary, and higher education levels; the number of high school graduates; and the number of degrees conferred by institutions of higher education.

During the year improvements were made in survey techniques, such as sampling procedures, coverage of surveys, forms design, methods of data collection, and analysis and interpretation of data. Improvements were also made in the collection of data through visits of staff members to State departments of education. Staff time in the field was shortened through the employment of local clerks or the preparation of photocopies of State records.

NEW SURVEYS

During the year work was begun on a number of new surveys which will be reported in fiscal 1958. The major studies are described briefly in the following paragraphs.

Survey of Beginning Teachers.—This study is focused primarily on the economic status of beginning teachers, their degree of satisfaction with various aspects of their job, and their commitment to teaching as a career. It is based on a scientifically selected sample in two stages—the first, a sample of school districts which were requested to submit lists of beginning teachers, and the second, a sample of these beginning teachers, to whom a detailed questionnaire was mailed.

Suburban City School Systems.—Because virtually all of the increase since 1950 in the civilian population of the United States has taken place in the 168 standard metropolitan areas it has become imperative that information about the large and increasing number of suburban school systems within these areas be collected and made available. Consequently the current biennial survey of city school systems was expanded in coverage and content.

The expanded survey will contain information on about 475 suburban cities, all located in standard metropolitan areas, including personnel and financial matters, the qualifications of their teachers, salary practices, specialized curriculum offerings, and class size.

County-Unit School Systems.—The county-unit school system, which is rapidly becoming a significant type of school organization, has not been systematically studied prior to the present survey. This survey of "complete" county units, that is, those counties which operate single school systems, represents an extension of the coverage of the *Biennial Survey of Education*.

Rural County School Systems.—This year the Office began to develop a program of rural school statistics designed to provide data similar to those published for city schools. A questionnaire identical with that which went to cities has been sent to about 1,200 counties which had been identified as having "rural" characteristics. Through the program the Office expects to provide valuable information for persons interested in improving the educational opportunities of rural children.

Highway Safety.—In cooperation with the National Commission on Safety Education of the National Education Association, the Office has requested all institutions of higher education to report the courses or activities they provide for training people in the field of highway safety. The results will be analyzed by specialists of the National Education Association and this Office, and will be published as a classified directory which should prove useful to students, counselors, employers, safety councils, and insurance groups.

Enrollment by Scientific Subject Field.—This survey was instituted in response to urgent requests from organizations and institutions concerned with the present and future supply of scientific manpower. A pretest was conducted in which 600 institutions of higher education were requested to report enrollments of junior-year students, by major field of science.

Other Surveys.—Two other fields of study which deserve mention, although they were in the drawing-board stage at year end, are a statistical study of adult education activities and a survey of teacher turnover, the primary purpose of which is to obtain a reliable estimate, on an annual basis, of the number of teachers leaving the profession.

Assistance to Schools in Federally Affected Areas

Fiscal year 1957 was the seventh year of continuous operation of the program for Federal assistance to schools in areas affected by Federal activity. Like the preceding years the seventh year showed a growth in the number of participating districts.

Federal payments to federally affected districts (P. L. 874, as amended) to aid in meeting current operating expenses for the year amounted to \$113 million. These payments were made on behalf of some 1,200,000 federally connected pupils claimed by school districts which had a total attendance of over 7.6 million pupils. The school districts receiving these funds provided free public education to approximately one-fifth of the Nation's public school enrollment. The number of participating districts in fiscal year 1957 amounted to approximately 3,400, an increase of about 500 in the number of eligible districts over the previous year. This increase in eligible districts was the largest since 1952, the second year of the program, when 600 new districts were found to be eligible.

From the beginning of the program in 1950 to the end of fiscal 1958, school construction projects approved numbered 3,705 for which Federal funds amounting to \$712 million had been allocated (Public Law 815, as amended). Local school districts which have received school construction aid under this program have added \$303 million in their own funds to these projects and in addition have provided sites and off-site improvements not included as a part of the approved project. The school construction work thus far initiated under this program is more than \$1 billion, and the classroom accommodations provided by the approved projects will be sufficient to house some 950,000 pupils.

One of the principal causes of the continued extension of the school construction program is the substantial program of military housing which has been authorized by the Congress under title VIII of the National Housing Act. This program, popularly known as the Capehart housing program, authorizes the Federal Government to issue mortgages sufficient to provide funds for some 150,000 family housing units on military installations. The program has been amended twice since its original enactment with the effect that the number of housing units to be approved under it has been enlarged and the date for final commitment of mortgages has been extended until June 30, 1959. Since the children who will live in these family housing units will need school facilities on or near the military installations, the Congress has provided for continued Federal assistance under Public Law 815 for school construction.

Since the amendments to the Capehart housing program extend the time for the approval and construction of the housing units, a 1-year extension of Public Law 815 to accommodate these new housing units, was recommended by the Department and adopted by the Congress. This extension will enable school districts to make claims for Federal assistance in school membership through fiscal year 1959.

In extending Public Law 815 for one additional year the Congress indicated its intention "to make a thorough study of the entire Federal impact problem in order to develop a program which will operate efficiently and economically without periodical extension and piecemeal changes"; and to this end directed the Department to present its recommendations early in the next session of the Congress.

Library Service

PUBLIC LIBRARIES

In 1871, the Commissioner of Education said in his Annual Report: "Public libraries are at once an important means and a valuable index of education. . . . Year by year this office should be able to present the growth of this valuable auxiliary to all forms of culture."

In 1957 the Office revised and enlarged its regular program of activities in the public library field. A public library specialist was appointed to the staff, with the special responsibilities for planning and conducting research and other studies to meet the increasing demands for objective data and trends. Added to the work in this area has been the coordinating of library services with adult education and services to the aging at the national and State levels.

Further evidence of the growing awareness of the important role which public libraries play in the educational life of the Nation can be found in the enactment of the Library Services Act (Public Law 597, 84th Cong.) signed by the President on June 19, 1956. This legislation provides for a 5-year program of Federal assistance to the States and Territories in extending public library services to those rural areas which have either no libraries or inadequate libraries.

Regulations were drafted and reviewed at a series of four regional conferences with heads of State library administrative agencies charged with the responsibility of carrying out State plans for the improvement and extension of rural public library service.

Thirty-five States and Hawaii submitted plans and qualified for their Federal allotments of \$40,000 each under the \$2,050,000 appropriation for fiscal 1957. These States not only matched the Federal allotment of \$1,440,000, but overmatched it by \$2,941,259; although they were required to put up only \$1,282,861, they put up a total of \$4,224,120. The percentages of total funds budgeted in State plans

by categories of expenditures were: Salaries and wages, 40.6; books and materials, 36.8; equipment, 10.6; and all other operating, 12.

Under the impetus of the Library Services Act a number of States have enacted new legislation and increased their appropriations for public libraries to meet the requirements of the act. Other States appropriated emergency funds so that they could immediately qualify. One State created a new library extension agency and appropriated funds to match the Federal allotment. The reports in the periodicals issued by the State agencies speak enthusiastically of the helpful effect of the Library Services Act on the library programs in the respective States.

EDUCATION FOR LIBRARIANSHIP

To meet requests for information pertinent to the widespread shortage of trained librarians throughout the United States, the Office has endeavored to maintain for the past 5 years a current list of higher educational institutions which offer courses in library science. The number of such institutions has increased during this period from about 400 in 1951-52 to nearly 600 in 1956-57.

PUBLIC SCHOOL LIBRARIES

A comprehensive statistical survey of public school libraries for 1953-54, the first since 1947-48, was completed during the year. By appropriate adjustments for the use of sampling and for nonresponse, it was possible to derive figures for the Nation as a whole. The calculations showed that 128,831 schools were involved. The number of librarians employed in 1953-54 was 30,753, of whom 15,971 were professionally trained and 14,782 had little or no professional training. The number of volumes in the school libraries at the close of 1953-54 was 102,915,052, of which 9,609,949 were added during the year. The total annual library expenditure, excluding salaries, was \$25,222,207, of which \$16,066,277 was spent for books and pamphlets and \$2,199,352 for periodicals and newspapers.

Advisory Committees

In carrying out its activities the Office had the cooperation of advisory committees, professional associations and groups, State departments of education, and educators and laymen. Among the advisory committees working with the Office during the year were Office of Education Research Advisory Committee, the National Committee on the Study of the Qualification and Preparation of Teachers of Exceptional Children, the National Advisory Committee for the Exchange of Teachers, the Advisory Committee of National Organ-

izations, and the Advisory Committee on the Library Services Program.

The cooperation of these committees provides a vital link in the continuity which the Office seeks to maintain in citizen-educator teamwork.

To provide a direct means of communication with and between organizations and associations the Office launched a new publication, Education Fact Sheet, and put out seven issues during the year. The publication carries brief items on the activities of the Office, national organizations interested in education, and the States and communities.

The President's Committee on Education Beyond the High School

The First Interim Report of the President's Committee on Education Beyond the High School was submitted to the President on November 16, 1956. The report, which included the Committee's preliminary conclusions, was intended to promote discussion among as many educators and laymen as possible. About 25,000 copies of the report were distributed.

Following the submission of the First Interim Report, the Committee organized itself into subcommittees for the purpose of preparing the Second Report to the President. This report will contain recommendations on the need for teachers and for student assistance, the problems of financing and of providing a diversity of educational opportunity beyond high school, and the relationships of the Federal Government to education beyond the high school.

In addition to making its own studies, the Committee sponsored five regional conferences during April and May 1957. The conferences, held in Boston, New York, Louisville, Saint Louis, and San Francisco, were attended by 1,400 laymen and educators who considered problems of post-high-school education as they related to the region. The staff developed a source book of statistical information and salient facts on post-high-school education for the use of conference participants. Each of the conferences submitted a report of its proceedings to the President's Committee.

The second report will be submitted to the President in fiscal 1958, and copies will be distributed to 120,000 educators and laymen throughout the country.

Major Publications Off the Press in Fiscal Year 1957

Accredited Higher Institutions, 1956
Administration of Public Laws 874 and 815, 6th Annual Report of the Commissioner of Education, June 30, 1956
Adventuring in Research to Improve School Practices in Homemaking Programs
American Cooperation with Higher Education Abroad
Austrian Teachers and Their Education Since 1945
Directors and Supervisors of Special Education in Local School Systems
A Directory of 3,300 16mm Film Libraries
Education for Better Living, 1957 Yearbook on Education Around the World
Education Directory, 1956-57 (Parts 1, 2, 3, 4)
Education for National Survival, A Handbook for Schools
Education in Taiwan
Engineering Enrollments and Degrees, 1956
Extraclass Activities in Aviation, Photography, and Radio for Secondary School Pupils
Fall 1956 Enrollment, Teachers, and Schoolhousing in Full-Time Public Elementary and Secondary Schools
Federal Funds for Education, 1954-55 and 1955-56
Financial Accounting for Local and State School Systems
Home Economics in Colleges and Universities, Planning Space and Equipment
National Stay-in-School Campaign, Handbook for Communities
Opening Enrollment in Higher Educational Institutions, Fall 1956
Planning and Conducting a Program of Instruction in Vocational Agriculture for Young Farmers
Progress of Public Education in the United States of America, 1956-57
Pupil Transportation Responsibilities and Services of State Departments of Education
Research in Industrial Education, Summaries of Studies, 1930-55
Resident and Extension Enrollment in Institutions of Higher Education, Nov. 1955
School District Reorganization Policies and Procedures
School Property Insurance, Experiences at State Level
The Secondary School Plant, An Approach for Planning Functional Facilities
Statistics of City School Systems; Staff, Pupils, and Finances, 1953-54
Statistics of Higher Education: Faculty, Students, and Degrees, 1953-54
Statistics of Higher Education: Receipts, Expenditures, and Property, 1953-54
Statistics of Land-Grant Colleges and Universities, Year Ended June 30, 1955
Statistics of State School Systems: Organization, Staff, Pupils, and Finance, 1953-54
Summaries of Studies in Agricultural Education (Supplements 9 and 10)
Summary of Federal Funds for Education
Teachers of Children Who Are Blind
Teachers of Children Who Are Mentally Retarded
Teachers of Children Who Are Partially Seeing
Teaching about the United Nations in United States Educational Institutions
Trends in Significant Facts on School Finance, 1929-30 to 1953-54
Work Experience Education Programs in American Secondary Schools
Higher Education (9 issues, September through May)
School Life (9 issues, October through June)

Table 1.—Enrollment in the continental United States, 1955–56 and 1956–57

[Office of Education estimates]

School	Year	
	1955–56	1956–57
Kindergarten through grade 8:		
Public school systems, regular full-time.....	24,588,000	25,283,000
Nonpublic schools, regular full-time.....	3,768,000	4,267,000
Federal schools for Indians.....	32,200	26,000
Federal schools under Public Law 874.....	16,000	19,000
Other.....	110,000	116,000
Total kindergarten through grade 8.....	28,514,200	29,711,000
Grades 9–12:		
Public school systems, regular full-time.....	6,860,000	6,876,000
Private and parochial schools, regular full-time.....	823,200	866,000
Federal schools for Indians.....	9,800	11,000
Federal schools under Public Law 874.....	900	1,000
Other.....	53,200	66,000
Total grades 9–12.....	7,747,100	7,820,000
Total elementary and secondary.....	36,261,300	37,531,000
Higher education:		
Universities, colleges, professional schools, including junior colleges and normal schools.....	2,996,000	3,244,000
Other schools:	2,906,000	3,244,000
Private commercial schools, day and evening.....	450,000	500,000
Nursing training schools, not affiliated with colleges and universities.....	91,400	91,000
Total other schools.....	541,400	591,000
Grand total.....	39,798,700	41,366,000

Table 2.—Supply and demand for elementary and secondary public and nonpublic school teachers, 1956–57

Item	Elementary and secondary
<i>Supply</i>	
Total teachers, 1955–56 ¹	1,266,000
Less emergency teachers, 1955–56.....	77,600
Total qualified teachers, 1955–56.....	1,188,400
Less 7.5 percent turnover of qualified teachers.....	89,100
Qualified teachers returning for 1956–57.....	1,099,300
Emergency teachers qualifying for 1956–57.....	20,000
New supply of qualified teachers (81.6 percent of elementary and 62.9 percent of high school teachers trained in 1955–56).....	76,100
Total qualified supply, 1956–57.....	1,195,400
<i>Demand</i>	
Total teachers, 1955–56 ¹	1,266,000
Teachers needed to meet increase in enrollment in 1956–57.....	50,100
Total demand, 1956–57.....	1,316,100
Shortage of qualified supply.....	120,700

¹ The number of elementary and secondary school teachers in the public school system, in the fall of 1955, was 1,135,930 (Office of Education Circular No. 467, Revised). To this must be added the number in non-public schools (private and parochial), in model and practice schools, in colleges and universities, in residential schools for exceptional children, and in schools operated under Federal auspices. The number in Catholic private and parochial schools in 1955–56 was 114,000 (estimated by National Catholic Welfare Conference, Dept. of Education). The number in the other types of schools is estimated as 16,250.

Table 3.—Grants¹ to States: Office of Education, fiscal year 1957

States, Territories, and possessions	Total	Colleges for agriculture and mechanic arts	Library services	Cooperative vocational education	Maintenance and operation of schools (Public Law 874)	School construction (Public Law 815)
1	2	3	4	5	6	7
Total	\$204,336,577	\$5,051,500	\$1,440,000	\$37,582,036	? \$93,194,675	\$67,068,366
Alabama	4,440,916	100,541	40,000	1,023,505	2,403,230	873,640
Arizona	2,312,158	77,477	40,000	197,420	1,343,063	654,198
Arkansas	2,337,833	89,048	40,000	759,496	725,618	723,671
California	33,748,271	175,599	40,000	1,873,650	16,107,775	15,551,247
Colorado	4,428,815	83,218	40,000	324,396	2,380,448	1,600,753
Connecticut	2,175,268	90,023	40,000	347,696	1,103,323	594,226
Delaware	407,328	73,173		170,186	113,919	50,050
District of Columbia	79,961			79,961		
Florida	5,429,497	97,644		602,112	2,717,360	2,012,372
Georgia	6,118,713	104,360	40,000	1,123,236	3,091,693	1,759,424
Idaho	867,535	75,872		210,327	538,165	43,171
Illinois	4,521,467	156,905	40,000	1,690,318	1,990,787	643,457
Indiana	1,928,961	109,245		963,073	666,799	194,844
Iowa	1,315,854	96,146	40,000	844,810	276,918	57,980
Kansas	4,198,327	89,006		574,038	2,871,295	663,988
Kentucky	2,268,184	99,375	40,000	1,029,962	766,318	332,529
Louisiana	1,827,217	96,769	40,000	724,292	659,970	306,186
Maine	1,107,971	79,115		202,875	689,238	136,743
Maryland	9,674,701	93,372		453,365	4,199,910	4,928,054
Massachusetts	3,049,749	116,789	40,000	720,724	1,604,452	567,784
Michigan	7,008,278	133,559	40,000	1,344,240	399,902	5,090,577
Minnesota	1,594,176	99,751	40,000	918,835	83,264	452,386
Mississippi	1,780,390	91,735	41,000	967,241	553,065	128,349
Missouri	3,717,508	109,448	40,000	1,063,406	1,243,468	1,261,186
Montana	1,263,528	75,896	40,000	210,270	374,668	562,694
Nebraska	1,970,096	83,222	40,000	427,369	366,250	553,255
Nevada	944,319	71,597		160,628	585,810	126,284
New Hampshire	732,599	75,319	40,000	149,790	403,871	63,619
New Jersey	3,215,614	118,233	40,000	740,906	1,471,328	845,147
New Mexico	4,552,144	76,795	40,000	217,207	1,791,937	2,426,205
New York	6,526,311	217,934	40,000	2,405,413	1,954,331	1,908,633
North Carolina	3,053,848	116,518	40,000	1,441,575	961,914	499,841
North Dakota	577,236	76,181	40,000	280,375	151,013	29,667
Ohio	6,296,978	149,269	40,000	1,686,442	2,921,747	1,499,520
Oklahoma	7,391,471	92,279	40,000	681,177	3,905,274	2,672,741
Oregon	1,733,154	85,176	40,000	390,110	681,904	535,964
Pennsylvania	3,904,622	174,720		2,059,943	1,245,487	424,472
Rhode Island	1,475,735	77,899		136,282	941,121	320,433
South Carolina	3,152,164	91,118	40,000	734,059	1,605,891	681,096
South Dakota	1,821,457	76,511	40,000	277,504	951,741	475,701
Tennessee	3,293,230	102,835	40,000	1,074,226	1,199,033	877,136
Texas	12,348,662	146,921	40,000	1,878,287	6,565,589	3,717,865
Utah	1,973,903	76,871		181,265	1,020,735	695,032
Vermont	330,302	73,768	40,000	167,670	48,864	
Virginia	14,284,826	103,104	40,000	975,508	7,655,804	5,510,410
Washington	6,633,305	93,731		580,427	3,762,991	2,196,156
West Virginia	938,918	90,606	40,000	617,951	144,026	46,935
Wisconsin	1,623,066	104,260	40,000	954,778	278,331	245,697
Wyoming	688,791	72,898		176,475	281,666	157,752
Alaska	3,478,734	71,283		18,937	3,153,264	235,250
Guam	287,160				287,160	
Hawaii	2,889,362	74,986	40,000	182,334	1,457,996	1,134,606
Puerto Rico	595,964	50,000		545,964		
Virgin Islands	20,000			20,000		

¹ On the basis of checks issued.² Totals do not include payments made to the Air Force, \$989,619; Navy, \$649,661; Veterans' Administration, \$2,649.

Gallaudet College

GALLAUDET COLLEGE is devoted to the education of deaf persons who because of their handicap would have difficulty in schools and colleges for hearing students. The college, located in Washington, D. C., is the world's only college for the deaf. It was accredited last May by the Middle States Association of Colleges and Secondary Schools. In addition to education, it conducts research into the educational problems of deafness. It consists of the Kendall School and the college proper.

KENDALL SCHOOL

Primary and secondary schooling is provided for deaf children in the Kendall School, which also serves as a laboratory school for teachers training in the college. The oral method of instruction is used for all pupils except those who make no progress under it. Enrollment last year was 75, of which 63 came from the District of Columbia.

GALLAUDET COLLEGE

The college, established in 1864 by act of Congress, offers the associate's degree after 2 years of study, and a bachelor's degree in the liberal arts and sciences. The Preparatory Department provides the senior year of high school for students who are unable to obtain it in the State schools for the deaf. The Graduate Department of Education offers a master's degree and a professional diploma in the education of the deaf to students with normal hearing, and offers a four-week training course to vocational counselors who wish to acquire a deeper understanding of deaf persons. Total enrollment in the college last year was 324 with students from 42 States, Hawaii, the District of Columbia, and 7 foreign countries.

Howard University

HOWARD UNIVERSITY, located in the District of Columbia, was chartered by act of Congress on March 2, 1867. The university offers programs of higher education on the undergraduate, graduate, and professional levels. Undergraduate students are registered in the college of liberal arts; graduate students seeking the master's and doctor of philosophy degrees are registered in the graduate school; professional students are registered in the colleges of medicine, dentistry, pharmacy, and the schools of engineering and architecture, music, social work, law, and religion. (The school of religion receives no support from Federal funds.)

The educational program of Howard University is conducted in keeping with the democratic purposes of the land-grant colleges and State universities with the low tuition fees and living costs which characterize these State institutions and with an educational program resting upon and permeated by the content and spirit of a general or liberal education. The university admits students of both sexes, from every race, creed, and national origin, but it accepts and undertakes to discharge a special responsibility for the admission and training of Negro students.

ENROLLMENT OF STUDENTS

During the school year 1956-57, the university served a total of 5,787 students as follows: 4,604 during the regular academic year and 1,183 in the summer session of 1956. The net total enrollment, excluding all duplicates was 5,020, distributed in the ten schools and colleges as follows: liberal arts, 2,297; graduate school, 490; engineering and architecture, 679; music, 290; medicine, 297; dentistry, 527; pharmacy, 140; law, 100; social work, 150; and religion, 50. This enrollment included a larger body of Negro professional students than

all other universities of public support in all the Southern States combined.

GEOGRAPHICAL DISTRIBUTION OF STUDENTS

Of a total of 4,604 students enrolled during the regular school year, 4,115 or 89.4 percent came from 40 States and the District of Columbia, while 489 students, or 10.6 percent, came from outside the continental United States including 43 foreign countries and 4 possessions of the United States.

The 4,115 students who came from the United States were distributed as follows: New England States, 81; Middle Atlantic States, 628; East North Central States, 204; West North Central, 69; South Atlantic States, 2,530; East South Central States, 297; West South Central States, 268; Mountain States, 6; and Pacific States, 32.

The 489 students from outside the continental United States came from 43 foreign countries, including 9 countries in Africa, 8 countries in Asia, 12 countries in Europe, 7 countries in Central America, 5 countries in South America, and 13 island countries in the British and Netherlands West Indies.

VETERANS

There were 821 veterans enrolled at Howard University during the school year 1956-57. These veterans were distributed among the 10 schools and colleges as follows: 363 in liberal arts, 153 in engineering and architecture, 18 in music, 46 in pharmacy, 54 in dentistry, 46 in law, 51 in medicine, 7 in religion, 15 in social work, and 68 in graduate school.

ARMY AND AIR FORCE ROTC

Army ROTC.—Two hundred and eighty-five students were enrolled in Army ROTC during the school year 1956-57, of whom 216 were in the first and second year courses.

Air Force ROTC.—A total of 287 students was enrolled in Air Force ROTC. Two hundred and forty-two of these were in the first and second year courses.

THE FACULTY

There were 528 teachers serving the university during the year 1956-57. Of this number, there were 295 full-time teachers and 233 part-time teachers. The full-time equivalent of the teaching staff was 348.6. Of this number 307 were teaching in the ranks of instructor and above as follows: 69 professors, 68 associate professors, 73 assistant professors, and 97 instructors.

From the beginning of the university's work in 1867, the Founders invited to the faculties of the university learned and able men and

women, on the basis of their ability and character as individuals and without discrimination as to sex, race, creed, color, or national origin. It was a major purpose of the Founders to employ Negro teachers, among others, on every faculty. Today the Negro members of the professional faculties of Howard University constitute together a group of professional teachers larger by far than all the Negroes so employed in all other American universities combined. The existence of this group of Negro university teachers at Howard University has been a standing inspiration to the Negro people for more than three-quarters of a century, and membership on one of these faculties has been the first employment of many of the outstanding Negroes in the public life of America. From them came the founder and operator of the first blood plasma bank in the world, the first Negro governor of an American possession, the first Negro in the Secretariat of the United Nations (Nobel Prize Winner), the first Negro member of the bench of the United States Court of Appeals, and the first Negro Cultural Attaché in the diplomatic service of the United States to a major European nation.

THE BUILDING PROGRAM

In 1956-57 the following new buildings were completed and occupied: the School of Law Building, the Biology Building, and the Administration Building. The occupancy of the Administration Building permits the university for the first time to bring together all the offices involved in university-wide administration.

Near the end of the school year 1956-57, work was completed on a new building for the preclinical branches of medicine. This structure constitutes an extension of the previously existing building provided for the College of Medicine. The old building is now being remodeled. The new building has five stories and a basement. It contains the classrooms required for teaching the preclinical branches of medicine, in addition to laboratories and the service spaces related to them. It is designed to provide for 200 preclinical medical students and 200 preclinical dental students and dental hygienists and to render service to 60 pharmacy students.

In January 1957 work was begun on a new men's dormitory. The new dormitory will provide for 304 students and is expected to be completed in time for occupancy for the opening of the fall term in 1958.

GRADUATES

During the year 1956-57, there were 560 graduates, compared with 554 graduates during the year 1955-56. These 560 graduates came from 31 States, the District of Columbia, the Virgin Islands, Puerto

Rico, and the following foreign countries: Egypt, Liberia, Nigeria, Sierra Leone, China, India, Barbados, Bermuda, Grenada, Jamaica, Trinidad, Cuba, Spanish Honduras, Albania, Germany, Latvia, Poland, Brazil, and British Guiana.

These 560 graduates were distributed among the 10 schools and colleges as follows: liberal arts, 237; engineering and architecture, 41; music, 22; graduate school, 60; social work, 28; medicine, 72; dentistry, 51; dental hygiene, 8; pharmacy, 17; law, 19; and religion, 5. The university also awarded three honorary degrees.

Since its establishment in 1867, Howard University has graduated 19,823 persons. By far the large majority of these graduates have been Negroes. Among their number is a larger body of graduates in medicine, dentistry, pharmacy, engineering, music, law, and social work than the entire output of Negro professional graduates in all universities and colleges of public support in the entire group of Southern States. These graduates are at work in 43 States and 27 foreign countries. In every population center in the United States they constitute the largest and most diversified group of trained Negro public servants related to any single institution in the world.

The largest number of graduates have entered the field of teaching, primarily in the Southern States. Two thousand eight hundred and seventy-three have entered the practice of medicine; 2,365 have entered the practice of dentistry and dental hygiene; 2,325 have entered the practice of law; 768 have entered the ministry; 824 have entered the field of pharmacy; 583 have gone into engineering and architecture; and 357 have entered the field of social work.

SERVICE IN FOREIGN COUNTRIES

In recent years, teachers from Howard University have served in Burma, Brazil, Egypt, Ethiopia, Germany, India, Israel, Iraq, Italy, British Guiana, and Japan. Fulbright scholars from the university have worked in Egypt, Ghana, Iraq, Japan, Norway, Sweden, Denmark, Italy, France, Greece, England, and India.

The responsible leaders in Government and the friends of America again and again have acknowledged their services as being of the greatest value to their country and to the cause of democracy in the world.

The most recent testimony from the Government affects work done by the Head of our Department of Architecture in British Guiana. "Dr. Mackey has made a magnificent contribution which transcends his outstanding technical competence. Dr. Mackey has established a relationship with the people of the country based on trust and mutual respect which creates an environment that is uniquely receptive to the ideas he has to convey."

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